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**COMMERCIAL BY DESIGN  
PROCEEDINGS OF THE WORKSHOP  
ON  
COMMERCIAL COMMODITY ACQUISITION  
JANUARY 17-19, 1978**



**SPONSORED BY:**

Department of Defense

Under Secretary of Defense (Research & Engineering)  
Washington, D.C. 20301

and

National Bureau of Standards  
Experimental Technology Incentives Group  
Washington, D.C. 20234

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## WORKSHOP OBJECTIVES

To establish a dialogue between the Department of Defense and private industry on the ways and means to acquire, use and support commercial off-the-shelf products to meet DOD requirements.

To identify commercial commodity acquisition problem areas, examine and develop procedural guidelines for "going commercial", and provide input material for a DOD "How To" Handbook.

To carry the workshop theme "Commercial By Design" back home.



## plenary session

## WELCOMING REMARKS

Speaker: Mr. Richard T. Penn  
Acting Director, Experimental Technology  
Incentives Program (ETIP)  
National Bureau of Standards

### Biographical Sketch:

Prior to his present assignment, he was on the ETIP Staff concerned with the conduct of coordinated studies and experiments to: (i) test and evaluate the effects of alternative government policies that affect the rate at which the private sector innovates, (ii) to publish definitive reports that evaluate the results of the experiments and, (iii) to recommend appropriate policy.

Earlier, he was a member of the staff of the Technical Analysis Division of NBS and directed an interdisciplinary group that conducted quantitative and qualitative studies for a wide range of Federal Government Agencies. Prior to joining the National Bureau of Standards in 1969, he served in the U.S. Coast Guard as a rescue aviator and then concluded his military career as a senior planner at Coast Guard Headquarters in Washington.

Member of Operations Research Society of America, Southern Economic Association, and a Fellow in the American Association for Advancement of Science.

Mr. Penn attended Carnegie Tech; received a B.S. in marine engineering from the U.S. Coast Guard Academy and a M.B.A. from George Washington University.

### Summary of Mr. Penn's Remarks:

It is a pleasure for me to welcome this group to the National Bureau of Standards. The NBS Experimental Technology Incentives Program (ETIP) has joined the Department of Defense in sponsoring this workshop on commercial products procurement policy.

Let me briefly explain ETIP's interest in this effort. ETIP was established to explore and test governmental policies and practices that will provide incentives to the private

sector of the economy to invest in innovation and technological change. In reality, what we are doing is attempting to stimulate a more rapid transfer of technology from the laboratory to the marketplace.

We have focused the program on four policy areas: procurement, regulation, economic assistance, and small business.

This workshop is of interest to our procurement policy area. We feel that the Commercial Commodity Acquisition Program (CCAP) initiated in the Department of Defense will make a major contribution to our understanding of the impact of government procurement policy on industry and technological innovation. We applaud CCAP's progress and hope that this workshop will aid the CCAP mission.

I certainly hope that whether you represent the public or private sector, you will find the workshop rewarding. Again, let me welcome you to the Bureau and may your visit be a pleasant one.

#### INTRODUCTION OF KEYNOTE SPEAKERS

Speaker: Mr. Dale Church  
ODDR&E  
Deputy Undersecretary (Acquisition Policy)

#### Biographical Sketch:

Dale W. Church  
Deputy Director of Defense Research  
and Engineering (Acquisition)

Prior to assuming this position, he was Corporate Counsel, Assistant Secretary and Director of Contracts, ESL, Inc., Sunnyvale, California.

Mr. Church attended Oregon State University receiving a B.S. degree in Business and Technology. He also holds a Juris Doctor degree from George Washington University and is a member of California and District of Columbia Bars.

Mr. Church has a wide range of experience in the field of

Contract Policy, negotiation, administration and settlement, both in government and private industry. He has had a private legal practice with emphasis on corporate law and has been a member of the Board of Directors of several corporations.

Text of Mr. Church's Remarks:

Good morning and welcome to "Commercial By Design". I am Dale Church, your defense co-host for the workshop.

The thought of acquiring and using commercial, off-the-shelf, products by the Department of Defense is not new. General George Washington crossed the Delaware in commercial boats. His reports to Congress and Daily Journal are replete with direct purchases of food, equipment, ammunition, and other support directly from the private sector. It was rightfully so then, and even more important to us today.

In January 1977, the Department of Defense embarked on an effort to increase the percentage of goods and services procured from the commercial marketplace. This effort was complementary to the Office of Federal Procurement Policy direction for the procurement and supply of commercial products. The DOD called its initiative the Commercial Commodity Acquisition Program, and that, among other defense and service component initiatives, has served as a pilot vehicle to determine how we can improve the overall track record. From the pilot program, service experiences and through such an enterprise as this workshop, we hope to develop the necessary guidelines that will foster successful implementation. You might say that commercial products acquisition was a philosophy, translated into a policy whose time for implementation has come . . . I speak about the time, because current events are favorable for commercial achievement:

- The national policy of relying on the private sector for purchase of goods and services has been reemphasized. The Chiles Bill, S.1264, which will become the Federal Acquisition Act, incorporates this emphasis.
- The restructuring of the Office of Federal Procurement Policy and the Department of Defense place a premium on the role of the acquisition executive and the professional logistician.
- The Federal Procurement Institute is constituted to move ahead on the improvement and consolidation of federal procurement regulations.

• The representatives of industry that are here today know that the private sector is a leader in technology, and an implementer of the free enterprise system that leads to world trade. It is our job to insure that system is sustained. There is a litany that could go in here, but we have with us today the policy-makers, the executors and industry people that make the program a challenge with the payoffs abundantly clear. It is a distinct pleasure to welcome each of you to "Commercial By Design".

At this time, I would like to introduce the Honorable Lester Fettig, who will discuss the Federal Policy aspects . . .

#### KEYNOTE ADDRESS

#### FEDERAL POLICY ON COMMERCIAL ACQUISITION

Speaker: The Honorable Lester Fettig  
Administrator, Office of Federal Procurement  
Policy

#### Biographical Sketch:

The Honorable Lester A. Fettig  
Administrator for Federal Procurement Policy  
Office of Management and Budget

Prior to his appointment as Administrator, Mr. Fettig was Chief Counsel and Staff Director of the Senate Subcommittee on Federal Spending Practices and Open Government.

Earlier, he was a professional staff member of the Senate Committee on Aeronautical and Space Sciences; a professional staff member of the Commission of Government Procurement; a Younger Rockefeller Fellow at the Brookings Institution and staff member of the Center for Naval Analyses.

Mr. Fettig received a B.S. degree in aerospace and systems engineering from the California Institute of Technology and a MS.S in engineering from the University of Southern California.

Summary of Mr. Fettig's Remarks:

Mr. Fettig indicated that the symposium was very important to the Office of Federal Procurement Policy (OFPP). He viewed it as needed "nuts and bolts" effort to provide answers that would help DOD and other Agencies implement the commercial products policy. Mr. Fettig stated that OFPP's promulgation of the commercial acquisition program was rooted in findings made by the Commission on Government Procurement. In addition, Mr. Fettig said, that there have been numerous General Accounting Office reports with the same basic theme, "the Government can realize substantial savings by increasing its use of commercial products."

In order to realize the potential savings from the commercial products policy, Fettig said the Government must start to act more like a "family shopper" and buy products directly from the commercial market. This will require that the Government stop the development of detailed specifications for common use items. In lieu of detailed specifications, Fettig suggested that simple purchase item descriptions and mission element needs statements (MENS) be employed to the extent possible. This would unleash new technology and substitute competition for the potpourri of regulatory controls so that the marketplace can be stimulated into serving the Government.

The implementation of the commercial acquisition program is one of the OFPP's highest priority programs. Fettig stated that the program is exciting as it provides an opportunity to bring about change and to improve Government management techniques. The symposium, according to Fettig, occurred at a very opportune time as it complements several major thrusts being made by the Administration in the procurement area:

1. The President's reorganization project (PRP) has identified the administrative services area as one of the key areas it wants to pursue. An administrative services study team has been assembled and they have started to study the Government's administrative services system. Vast changes in the current system are possible and the study team provides each of us an opportunity to express our ideas and thoughts on how we think the administrative services apparatus should be organized.
2. In addition to the PRP effort, we are on the verge of having a new acquisition law. Senate bill, S.1264, is expected to be passed by the full Senate early next session. House passage should follow soon thereafter. This bill will give the legislative base that

we feel necessary to bring about many of the changes that we desire.

3. Besides S.1264, actions are finally commencing toward the development of a true national supply system. It is often thought by many, both in and out of the Government, that we now have a national supply system in the Federal Supply Service of the General Services Administration. As many of you know this is not true, we have many different supply systems in the Government.
  - VA, DOT, GSA, DOD and HEW all have supply systems.
  - The goals of the national supply system are very similar to the goals of the "buy commercial program," we want to:
    - improve our responsiveness to users.
    - channel the Government into commercial distribution systems.
    - improve management and eliminate waste.

In conclusion, Fettig said that the President and James McIntyre, Acting Director of the Office of Management and Budget, supported his efforts to improve Federal procurement.

#### OSD VIEW

Speaker: The Honorable  
William J. Perry  
Undersecretary of  
Defense, Research  
& Engineering, DOD

#### Biographical Sketch:

Dr. William J. Perry  
Undersecretary of Defense for Research and Engineering

Prior to this appointment by President Carter, he was President, and one of the founders of ESL, Incorporated, Sunnyvale California. Dr. Perry was Director of the Electronic Defense Laboratories, Sylvania Electric Products, Inc., before establishing ESL, Inc.

Dr. Perry has served on scientific advisory committees for the Department of Defense and the National Security Counsel. He

has received medals from the United States Army and the Defense Intelligence Agency in recognition of his outstanding contribution.

He received his B.S. and M.S. degrees in mathematics from Stanford University and his PhD. in mathematics from Pennsylvania University.

Summary of Dr. Perry's Remarks:

Dr. Perry noted at some length the several significant differences between the Soviet Union and the United States in the areas of defense spending and defense capability. He noted that the current D D technology base is about one half of the 1964 level. Dr. Perry indicated that the Soviets passed the United States in defense spending in about 1971, and that their spending is about 150% of ours. He asserted that the U.S. spends about 6% of the GNP on defense while the Soviet Union spends nearly 15% of their GNP on defense. Dr. Perry outlined three ways that the United States could meet Soviet competition. He called for a more effective use of U.S. technology, maximizing our strength as well as exploiting our NATO alliances and more effective use of our industrial base. It was noted that the five workshop topics were closely related to the effective use of our industrial base. He emphasized the influence of D D in the commercial marketplace and noted his support for the CCAP program.

Dr. Perry called for the various workshops to keep the Buy Commercial Guidelines simple and direct to the point. He observed that the acquisition of commercial products and of the commercial distribution systems could significantly reduce costs. The increased emphasis on NATO standardization was addressed and he recognized that the United States will be buying more from NATO countries.

Dr. Perry concluded his remarks by expressing his confidence that the conference would be successful.

## INDUSTRY PERCEPTIONS

Speaker: Mr. Hugh E. Witt  
Director of Government Liaison  
Washington Office  
United Technologies Corporation

Mr. Witt was the first Administrator of the Office of Federal Procurement Policy, Office of Management and Budget prior to assuming his present position.

Mr. Witt received his B.S. degree in Commerce from the University of Kentucky and his M.S. degree in Industrial Management from M.I.T. His Government service began in 1951 when he joined the Air Force Headquarters Staff. He moved progressively through logistics and procurement assignments, culminating in his appointment as Deputy for Supply and Maintenance to the Assistant Secretary of the Air Force (Installations and Logistics). He then served as Special Assistant to the Assistant Secretary of the Navy (I&L) and later as Principal Deputy Assistant Secretary for Defense (I&L). He received a number of awards during his Government career, and has appeared as a principal witness before major Senate and House Committees.

### Text of Mr. Witt's Remarks:

As I am the only representative from industry on the program this morning I feel outnumbered but undaunted.

And when you look at the backgrounds of the speakers you will find all of us have had a mixture of business and government experience. Interestingly enough, those from the Government this morning have spent more time with industry, and I am speaking for industry, after 26 years with the Government.

Is this good? I say yes, I say it provides a better balanced viewpoint from all sides. We face enough problems when industry and the government are communicating. Let's not contribute to these problems by making communications more difficult, by preventing the leavening of opinions which results from seeing these issues from the outside as well as from the inside.

Now that I have that off my chest, I can move to my part of the program.

I want to say, frankly, that I hesitated when I was asked to participate. And then I thought of the many times I had struggled with this basic problem during my years in the Pentagon, and I thought of putting together the first drafts of a Government-wide policy after I had moved across the river to the Office of Management and Budget.

I concluded that I had put too much into this effort to pass up the chance to be involved in a very major step forward. And that is what we are involved with today.

Industry perceptions. That is my assignment. And I've found plenty of them. You will note that I was not to specifically cover good perceptions or bad perceptions, but all perceptions. That is what I've done.

It is appropriate to quote here from Justice Brandeis: "In frank expression of conflicting opinion lies the greatest promise of wisdom in government action; and in suppression lies ordinarily the greatest peril." As you listen to my words, please keep those words in mind.

As expected, industry comments are predominantly favorable toward the program. I even received a few remarks such as: "What took so long?"

A number of contacts stated they were especially pleased to see the Office of Federal Procurement Policy putting some heat behind the effort. The emphasis here was on the urgent need for action in Federal agencies other than the DOD.

I was reminded that the DOD/General Services Administration interface is the very key to how a lot of material is bought for use by the DOD. And since I was asked to be very straightforward in my remarks today I will also note that a number of contacts said they were disappointed that GSA was not a participant in these sessions. I can pass along to Les Fettig the definite perception by many industry people that the civilian side of the Government is not as receptive and as open minded as the military to this whole concept.

There is no question that my industry friends understand the complications involved in carrying out something of this magnitude. It's a big, tough job. But we also have seen too many examples of the actual payoff when the concept is carried through. Some "rice bowls" will just have to be broken and some old-line thinking changed.

I would be less than candid if I did not say there are plenty of skeptics out there. To quote: "They've been talking about this for years but we've seen damned little action."

There was considerable agreement with a statement in the July Defense Management Journal Article on "Going Commercial". Namely; "If DOD is to be a customer for commercial products, it must act more like a commercial customer." This can be made to happen. Even with a full understanding of the Bureaucratic thickets involved, I am sure it can be made to happen.

A lot of us with experience in the DOD have seen the old system creak and groan when a change was pumped in. But we have also seen the system adapt to something new when it was obvious that the system would benefit. And as my industry colleagues point out, this program should crank out benefits for just about everyone.

Concerning a few more specific comments, some industry contacts were practically ecstatic about the 48 to 72 hour service they could guarantee the government from their own distribution systems. They regaled me with stories of government users switching to commercial suppliers because they were weary of waiting for shipments from government warehouses. There was no doubt that healthy savings would accrue from commercial distribution systems.

As expected, I received comments to the effect that use of commercial items would keep a lot of obsolescent hardware from entering the DOD inventory. Industry is convinced that they are in the best position to keep current on the new development of commercial items.

The interchangeability issue was raised. That is, spare parts produced specifically for the military not interchangeable with comparable commercial parts. What does this mean? Large quantities of the military parts must be kept in inventory to meet possible wartime needs.

Some industry people are convinced that more work will be required in the Life Cycle Cost area. New LCC models will have to be built for certain types of equipment.

And how about this comment? "The Government appears to have used detailed specifications on the basis of covering all contingencies, both real and imagined. As a result, they actually encourage most manufacturers to shy away from participation." I am convinced that's a valid statement for some types of commercial items.

There are some strong feelings out there on "total cost of ownership." The Government has done a poor job of convincing a lot of people that the cost of managing the program, cost of storage, cost of transportation, cost of inventory losses, cost of obsolescence - that these costs are given full consideration in "buying commercial." I note that our friends at the General Accounting Office are calling for improved cost figures by DOD and the GSA. I also note that the GAO is sticking with its estimate that the Defense Logistics Agency spends \$64 to purchase and distribute \$100 worth of stock in Depot programs.

The GAO concludes that supply agencies will be cost effective only when they consider total costs of procuring and stocking goods versus the costs of using the commercial distribution system. To that, I have heard a lot of fervent industry "Amens."

Now let's shift gears. Was all sweetness and light? Absolutely not.

How about the small firm that is producing against a government specification, and has been for years? Hasn't the government, in effect, created a special strata of industry which it now threatens? These are valid questions which will obviously have to be faced as the details of policy implementation are worked out.

And, as expected, I collected some strong feelings concerning the requirement for a commercial distribution system. Why should a long time supplier to the Government be knocked out of the game just because he doesn't have warehouses all over the country?

And isn't it the policy of the Congress, supported by the President, that every possible assistance be given to the small businessman? And won't more small businesses be hurt than helped by the thrust of the new policy? Good questions. They may not surprise a lot of people, but they must be considered.

There were some remarks concerning the use of preferred item list. Even with the understanding that such lists serve to prevent inventories from becoming monstrosities, some contractors feel they might well narrow purchases down to one manufacturer. A warning flag should be raised on this issue.

My attention was also called to the supply problems which surfaced during the early phases of the Viet Nam conflict. A lot of straight-commercial items looked good in inventory but failed to meet the test under wartime conditions. I was struggling with a lot of those crises in the Air Force at that time and I can guarantee they are serious issues.

Another point which was made concerns who in the Government decides which product best meets the user needs, the user or the procurement officer? Obviously that is a loaded question from the way it is presented. Somebody out there doesn't care much for procurement officers! At the same time, I have heard this cry in the wilderness many times in the past, and with some validity.

To summarize, there is a terrific amount of industry support and enthusiasm for this program. At the same time this enthusiasm is quite frankly tempered by caution which springs from doing business with the Government. Let's face it- we've got a big bureaucracy to deal with. Thousands of people making thousands of decisions. And the word moves slowly to the troops.

If I may quote from Thomas Jefferson: "Laws and institutions must go hand in hand with the progress of the human mind. As that becomes more developed, more enlightened, as new discoveries are made, new truths disclosed, and manners and opinions change with the change of circumstances, institutions must advance also, and keep pace with the times."

The Commercial Commodity Acquisition Program is, in effect, keeping pace with the times. I can only hope that you gathered here today do not permit that pace to slow or falter.

#### PRESENTATION OF WORKSHOP CHARTERS AND INTRODUCTION OF PANEL CHAIRMEN

Colonel Justin A. Holmes, CCAP Task Group Chairman, then presented and briefly discussed each of the Workshop Charters and introduced the panel chairmen to the group.

Mr. Charles Hulick, Procurement Director, ETIP, presented an overview of the Experimental Technology Incentives Program (ETIP) and described the CCAP/ETIP interface. He cordially welcomed the attendees to the National Bureau of Standards.

DEFENSE-INDUSTRY INTERCHANGE

(EVENING SESSION)

Speaker: Mr. David Packard  
Chairman of the Board  
Hewlett Packard Company  
Defense-Industry

Biographical Sketch:

Mr. Packard returned to his present position in 1971 after serving as Deputy Secretary of Defense for three years.

Prior to his election as Chairman of the Board, he has been one of the founding partners of the Hewlett-Packard Company.

He currently is a director of the California State Chamber of Commerce, Standard Oil Company of California, Caterpillar Tractor Co., the Atlantic Counsel, and a member of the Senior Executive Council of the Conference Board.

He received his Bachelor of Arts degree and an Electrical Engineering degree from Stanford University. Mr. Packard holds honorary degrees of Doctor of Science from Colorado College, 1964; Doctor of Laws from the University of California, 1966; Doctor of Laws from Catholic University, 1970; Doctor of Letters, Southern Colorado State College, 1973; and Doctor of Engineering, University of Notre Dame, 1974.

SUMMARY OF MR. PACKARD'S REMARKS:

Dave Packard stressed the savings that can be realized in dollars and time by not writing detailed specifications where good commercial products that can do the job are already available. He (also) noted the importance of small business enterprises in supplying commercial products of their own design. These small companies are often the ones that make the greatest technical contribution. The Defense Department must be careful not to exclude them through standardization or complex procurement procedures.

## WORKSHOP TOPICS

The conference was structured around five Panel Workshops which met regularly during the three days of the conference. Each panel workshop was provided with a charter which served both as a starting point and a framework to guide the work of the group. Case studies which documented certain acquisitions made during the pilot CCAP program were also provided to all panel participants. These case studies provided a basis for initial discussion and served to focus attention in the areas of interest in each panel workshop.

Each panel workshop, considering the guidance in their panel charter was instructed to rewrite, mark-up, and edit the draft manual "How to Buy Commercial". Each panel workshop also provided, through its chairman, a summary report of its findings and recommendations to the closing plenary session. Following are the charters for each of the five workshops:

### CHARTER: USER NEEDS WORKSHOP

This subject involves consideration of two basic types of user requirements, i.e., new requirements and recurring requirements. New requirements include products or systems not previously acquired for the intended use and which may require the development of new products or systems. Recurring requirements include products or systems previously acquired for the intended use which are covered by a military or Federal specification and which either (i) are not available or sold in the commercial market to non-Government customers or (ii) represent commercial products or systems that require substantial modification in order to meet Government specifications.

It also involves the user's interface in system acquisitions where requirement tradeoff decisions are necessary (on the part of the Government or system prime contractor), on the issue of development of new subsystems or components, acquisition of commercially available subsystems or components, or either GFE or CFE alternatives.

A key factor in the development of the statement of the user's need, or hardware requirement based on that need, is knowledge of a product alternative that will serve the purpose. This is particularly important in the case of recurring

requirements where the choice is to order more of the same or to modify existent hardware. When users are continuously aware of what is available on the commercial market and there is evident advantage in acquiring a commercial product, the potential for commercial product acquisition is enhanced. Where requirements action is initiated without this knowledge it becomes difficult to change direction later in the development and acquisition process.

#### CHARTER: MARKET RESEARCH WORKSHOP

The degree of success in efforts to increase the use of commercial products depends largely on the extent of knowledge of what is commercially available. Market research in this context consists of two types. First, there is an ongoing program to advance technology and explore new developments for defense applications. These categories have both specific and general application to future DOD requirements and may be identified to particular high technology firms, trade associations, technical societies, or other private organizations that offer these products or are aware of new developments or sources in a given field. Second, there is a search for sources that offer commercial products to meet a current DOD need. This type of market research includes, but is not limited to, the review of existing source lists for similar products, the use of mercantile publications, published catalogues, and direct contacts with industry and trade associations. Implicit in this effort is the identification of products that are suitable and to determine whether there are competing products which are acceptable and will perform as required. The specific need may be met by choice of a commercial product on Federal Supply Schedule or under other Government control. If so, procurement, logistic support and product evaluation personnel can probably abbreviate their tasks.

While the panel on "Acquisition Strategy" will address issues involved in applying the test of "commercial market acceptability" (OFPP policy) as a condition of participating in a procurement, it is clear that the acceptability (performance capability and reliability) of products is a factor to be considered in the market research effort.

To meet the Government's policy of allowing each seller an equal opportunity to compete, various Federal or military specifications are used. Commercial products, commercially developed, sold in substantial quantities to the general public, also contain many industry standards. For example, the American National Standards Institute is the coordinating

agent for approximately 6,000 national standards. Other organizations develop and publish standards, e.g., the Underwriters Laboratory (UL). These standards may ease the market research task by listing products by industry standard rather than trade-name or manufacturer. In theory, where suitable industrial standards exist, the less apparent is the need for a government specification, and the chances of competition by several sources is increased.

#### CHARTER: ACQUISITION STRATEGY

In the past, the acquisition process started with the receipt of requirements. The efforts of this panel are to be concerned primarily with the process that results in a decision on acquisition strategy ranging from preparation of the procurement package to initiation of procurement action and effecting the procurement. However, this panel, as in the case of others, should also consider issues in the full context of acquiring, using and disposing of a product, i.e., life cycle implications.

The nature of the Government's needs as reflected in the contract document directly impacts on the alternative techniques available for use in the procurement process. Similarly, procurement decisions may directly (and possibly adversely) affect user satisfaction. This panel, therefore, must carefully examine the role, communications, and coordination, to be undertaken by all elements participating in the total process. Acquisition managers and contracting officers are most helpful in providing information and advice to offices having non-procurement functional responsibilities in advance of decisions on new development, market research (where not performed by procurement offices), product improvement or modification, specifications drafting, and on logistics support contract techniques.

The overriding issues and subjects to be addressed by this panel involve new or better ways and means to utilize all participating elements in a way best calculated to achieve commercial product acquisition objectives and to structure solicitation documents so as to (i) encourage competition, (ii) place maximum reliance on the disciplines of the commercial marketplace and (iii) simplify and expedite the acquisition. Acquisition Strategy is the development of a coherent package, involving all aspects of the requirement from identification of initial need to logistic support of the item throughout its useful life. To the extent that foreseeable difficulties can be identified and resolved by early planning the customer will receive maximum satisfaction at the optimum cost of ownership. Acquisition strategy is extended in the

"team" concept and involves coordination through a variety of skilled, disciplined professionals.

#### CHARTER: LOGISTIC SUPPORT WORKSHOP

This panel is primarily concerned with issues and problems associated with providing maintenance and spare parts or replacement support for commercial items (or for military items that incorporate commercial components) under a variety of circumstances, including total commercial support, total organic support, or a mixture. Since a key objective of the workshop is to explore more efficient and less costly methods for meeting needs by greater reliance on commercial sources, this panel should identify problems, solutions and policy involved in total commercial logistic support or mixture of commercial and organic. This effort implicitly involves the question of trade-offs that may require resolution at the time the initial trade-off analysis is made on whether it is more efficient and less costly to acquire commercial products in lieu of developing new items.

In DOD, the critical consideration is whether the product supports the military mission. The fact that a product is mission critical need not lead to full DOD logistic support. Industry stock levels, prepositioning, premium transportation, and various combinations of support techniques will differ for each requirement. A present concern is off-shore support involving NATO Allies and U.S. military missions. The contingency reserve of supplies in the commercial distribution pipeline is a basic consideration.

#### CHARTER: PRODUCT EVALUATION WORKSHOP

The issues for consideration by this panel focus on assuring quality, reliability and maintainability (RAM), the effect of increased commercial product acquisitions on the standardization program, and the use of reliability improvement warranty (RIW) as a means of enhancing quality. To a considerable degree, the efforts of this panel will overlap with others, particularly with regard to placing maximum reliance on the commercial market acceptability of products and minimizing the need for pre-solicitation, pre-award, or post-award test and evaluation and the application of QA requirements in the manufacturing process.

What is the desired means of increasing the commercial or Base Procurement approach of a close linkage between user, buyer, and seller? A commercial Sales Manager in a retail store must foresee user needs, prices and quality very accurately to earn a bonus. What frequently happens in DOD is that supply

and procurement personnel buy "paper". That is, the process of drafting requirements and purchasing separates these persons from the user and the product.

Greater use of commercial products requires effort to evaluate commercial products in the real world. Too often specifications, warranties and other "paper" do not result in user satisfaction. The goal sought is to survey products in the marketplace for "as is" suitability for Government needs. Involvement of the user, contracts personnel, logistician, and inspector is needed in the product evaluation phase. Cooperative effort should be directed at development of a mechanism to enable the Government to quantify product value so that the lowest price meeting minimum specifications is not necessarily the determining factor. Life cycle cost techniques are difficult and costly to project in detail for competing products, and they do not measure intangibles (e.g., safety, convenience, operator comfort, appearance).

Product follow-through is an essential consideration. In the commercial sector, the developer is usually responsible for installation and maintenance of his equipment on the customer's premises. To satisfy a customer, the maintenance must be timely and effective. Good commercial organizations use the maintenance program to monitor the experienced MTBF and the MTTR of the fielded hardware. Anomalies can be quickly identified, and corrective action taken. Redesign, improved training or revised manuals can be expected to upgrade performance during the early years of product life.

DOD procurement practices too often preclude the developer from following his product into the field. Maintenance is performed by service personnel supported by the typical depot system. Record keeping is scattered and difficult. Feedback to the developer is inadequate or nonexistent. The CCAP and CISP can be vehicles that would keep the successful vendor in the loop during the early years of product life. The contractor will retain his interest and expertise to solve problems that arise because of the potential inputs to the private sector product. One approach would be to give a new product (or supplier) only a limited portion of the DOD market to permit comparison of his product and service with a prior product (or supplier).

## WORKSHOP REPORTS

### A - USER NEEDS

Chairman: Mr. John E. Harris  
Systems Management Directorate  
Headquarters, TRADOC

### B - MARKET RESEARCH

Chairman: Mr. Al Steiner  
Marketing Manager  
Hewlett-Packard

### C - ACQUISITION STRATEGY

Chairman: Mr. Harvey J. Gordon  
Deputy for Procurement  
U.S. Air Force

### D - LOGISTICS SUPPORT

Chairman: Mr. J. J. Genovese  
Assistant Deputy Chief of Navy Material,  
Logistics  
U.S. Navy

### E - PRODUCT EVALUATION

Chairman: Rear Admiral Robert W. Watkins  
Executive Director of Quality Assurance  
Defense Logistics Agency

## **workshop A**

### **user needs**



**Chairman:** Mr. John E. Harris, Systems Management Directorate, Headquarters, TRADOC

**Panelists:** U.S. Navy — RAdm. J. F. O'Hara, Director Tactical Air, Surface & EW Development  
Industry — Mr. Richard O'Leary, Vice President, Corporate Development, Onan Corporation  
Case Brief — Video Tape Recorder, LTC L. L. Higgins, USAF/RDQRT

## USER NEEDS

After introducing himself to the workshop members, Mr. John Harris, the Chairman, indicated that the group was charged with looking at the following two types of requirements, or user needs:

- o New - systems not previously acquired
- o Recurring - products previously acquired for the intended use covered by a MILSPEC or Federal specification

Three separate briefings were then provided to stimulate the group's thinking and serve as discussion mechanisms. RAdm. O'Hara presented a paper entitled "Buy Commercial". A summary of major points presented are contained in the following paragraphs.

Adm. O'Hara indicated that the Navy feels that buying commercial is of prime importance during these times of rising costs and tightening fiscal constraints. He felt that the workshop was a strong signal that DOD wants to take a positive approach in procuring commercial products. He acknowledged that in the past in many cases DOD has missed the boat --they developed unique systems rather than buying off-the-shelf. As a result, R&D expenditures were duplicated and frequently the systems were behind the state of the art because of long development cycles. Adm. O'Hara then cited a number of reasons for what he called a "Do It Ourselves" philosophy. These included:

- o Provisioning spare parts which requires detailed documentation.
- o Maintaining equipment on-board ships which requires both maintenance and training publications.
- o Single year funding which precludes long term purchasing commitments.
- o The need for specifications, which frequently become unreasonably rigid and detailed.

Adm. O'Hara then cited several things that could be collectively done to further procurement of off-the-shelf commercial items for military use. They included:

- Seeking changes in Federal procurement to permit commitment beyond one year
- Encouraging industry to do a better job of providing spare parts and documentation
- Having the military re-think their methods and objectives in preparing specifications

Following Adm. O'Hara's presentation, valuable industry insight was obtained from Mr. R. E. O'Leary, Vice President of Corporate Development for Onan Corporation. After acknowledging his potential bias as a corporate representative, Mr. O'Leary expressed his opinion that corporations are obliged to assist DOD in developing programs with potential for achieving a cost effective state of readiness. He correctly reminded the panel members that their charter was to focus only on DOD requirements that have fungible commercial counterparts, not with weapon systems. Mr. O'Leary then provided, to the panel members, copies of material he had prepared or reviewed in preparing for the workshop. Included in this material was a checklist of problems to be considered, and a sampling of statutes, regulations and executive orders inhibiting the CCAP program.

Mr. O'Leary then suggested an evaluation of the condition under which DOD is expected to purchase goods. The procuring organization was characterized as being required:

- To use a single product specification to serve a diverse lot of users, many with distinguishable application or environmental requirements
- To provide every seller or comparable products an equal opportunity to compete for each product buy
- To define the requirement in terms of a detailed, minimum product design specification
- To utilize the lowest initial unit price as a single acid test for product selection, and, in addition
- To preserve and encourage the growth of small and minority businesses
- To provide employment for disabled and surplus labor, and
- To provide an order backlog to keep the smoke going up the chimneys of our federal prisons

It was also pointed out that procurement responsibility was divided among three virtually unrelated basic groups to (1) establish the need and responsive product, (2) execute the formal buy, and (3) administer the contract with no means for conducting a total post-program audit.

After citing the diverse goals which have been expressed by DOD, Mr. O'Leary indicated that he was satisfied that such goals could be attained if DOD established itself as a knowledgeable, professional commercial customer who

- o Knows what it wants
- o Can plan its requirements
- o Understands the tradeoff economics of production
- o Seeks an optimum balance of price, quality and service
- o Can be relied upon over time to reward a supplier who will invest in anticipation of his customer's developing requirements

Mr. O'Leary then offered to the panel members for their consideration the following recommended approach:

- o Recognize that a truly effective reorientation of DOD procurement objectives can only be achieved by a reformation of the ground rules by the Executive and Legislative Branches (for example, the Chiles Bill).
- o Place responsibility for procurement under requirement-oriented teams (for example, power, construction equipment, etc.).
- o Have these procurement teams pull together all elements of procurement for discrete classes of products, and discretely hold them responsible for the total cost/benefit results of its performance.
- o Set aside the entire system of protests.

After Mr. O'Leary's presentation, Lt. Col. Higgins presented a case briefing on the Air Force procurement of commercial airborne video tape recorders. As indicated in the case briefing, although there were some modifications required, the equipment was still basically commercial OTS equipment. The procurement resulted in a considerable time and cost savings over trying to develop a MIL Spec unit. It was explained that the

biggest problem with trying to buy a commercial product is that the Air Force procurement system is not structured to facilitate this. Things like "design to cost", "RIW", and "production readiness" have to be addressed irrespective of their relevance; this causes delays in the procurement cycle. R&D acquisition organizations do not seem to appreciate that a commercial item may need new procedures. New simplified procedures should be written for the procurement of commercial units. It still takes four to five months to procure a commercial system. Since the item has been designed and built and its capabilities are known, logic dictates that there must be a faster way to procure it.

Following the presentation, the panel discussed various aspects of the requirements or user needs documentation. A considerable amount of time was spent in discussing required operational capability documents, how they are initiated and ultimately result in a procurement. Industry representatives were queried not only on how they document their corporate equipment needs, but how their purchasing departments interface with the equipment users. Following these discussions, the panel then determined that there were three types of acquisition where commercial items could satisfy user needs as the most cost effective solution. These were:

1. Commercial Non-Development Items. Off-the-shelf with no changes whatsoever for use by DOD agencies.
2. Military Adapted Commercial Items. These are commercial items which are modified in some manner for military use.
3. R&D of new items which use commercially available components and assemblages.

The group then identified the following areas as potential improvements to the existing DOD policies and procedures so as to effectively implement CCAP.

1. New Items - Ensure that the user states concisely the minimum essential operational, technical, logistical, and cost information necessary to initiate full-scale development or procurement of a materiel system.

Existing MIL/FED Spec Items - At the reorder point, as part of the trade-off analysis, the availability of commercial items must be considered. If commercial items are available, the specification must be restated in the same manner as a new item. No consensus - e.g., impact on multi-year procurements must be considered.

2. Reorient the existing DOD standardization program to emphasize use of commercial components, end items and assemblages of commercial components in lieu of military specs during the cycle review. (Investigate use of Identification Listing Catalog for Identification throughout Government).
3. Encourage five-year multi-year procurement in order to reduce the proliferation of makes/models issued to users. This applies primarily to military users.
4. Provide funding for Government testing of commercial accepted products supplied by small business who lack the appropriate data base of major industry suppliers.
5. Investigate changing ASPRs to allow DOD to effectively eliminate unqualified suppliers.
6. Consider changing ASPRs so that you don't automatically accept lowest bidder -- exercise judgment. The lowest initial bid is only one element of the evaluation. Other items to be included are: life-cycle costs, serviceability, maintainability, delivery performance, product quality and user's satisfaction with the supplier's products. Present protest system should be changed to permit DOD to exercise these judgments provided it does not unfairly favor award to one contractor over another.
7. Develop a system to identify, appraise and disseminate within DOD commercial product performance.
8. Establish a POC for each commodity group to provide a single point, professionally staffed industry/user interface through coordination with the user representative of each service within DOD. No consensus.
9. Encourage non-government development of industry specifications/standards for commercial items that will meet Government user needs.

## **workshop B**

### **market research**



**Chairman:** **Mr. Al Steiner, Marketing Manager**  
**Hewlett-Packard**

**Panelists:** **Industry — Mr. John Fluke, Chairman & Chief Executive, John Fluke Manufacturing Company, Inc.**  
**U.S. Air Force — Mr. Oscar Goldfarb, Deputy for Maintenance and Supply**  
**U.S. Army — Mr. William L. Clemons, Associate Director Procurement Policy, DARCOM**  
**Case Brief — USAF PRAM Commercial Buying Experience, Colonel E. C. Parker, PRAM Project Officer**

## MARKET RESEARCH

The workshop was opened by Mr. Al Steiner. He briefly reviewed the group's charter and introduced the panelists. He then spoke briefly of what he saw as Government's primary problem in terms of market research:

1. No one ever gets to be an "expert" in any particular thing, and
2. Some very fundamental changes are needed in terms of getting rid of some of the multitude of regulations.

Each member of the panel then gave a brief presentation on topics related to the charter of the group.

Mr. Oscar Goldfarb spoke of what he saw as industry's primary problems in dealing with the government. He explained that industry must understand exactly what a huge giant the federal government is, and that it cannot be viewed as a company that has the ability to be fairly flexible. He further emphasized the fundamental lack of communication between government and industry and explained the definite need for improvement in this area.

These points were then restated by the Chairman as he urged the panel to give their best efforts to generate ideas to help government and industry to deal with each other in these areas.

Mr. William L. Clemons, Associate Director Procurement Policy, DARCOM spoke next. He spoke about the Army's Development and Research Command (DARCOM) and its role in commercial procurements. A summary of his remarks is presented here.

From the Army point of view there are several phases in determining availability/suitability of a given commercial item. Investigation and work in these phases may be and often is simultaneous.

Within the Army, the user representative, the training and doctrine command (TRADOC), identifies a requirement to perform a mission and issues a draft Required Operational Capability (ROC) document.

The ROC statement is deliberately broad enough to include the products of leading manufacturers marketing an item of the type, size, or work capacity needed.

Commercial items considered for acquisition are limited to those which have been in general use by civilian industry in essentially the same configuration and where sufficient data have been collected from manufacturers, trade organizations and users to establish that the item is an acceptable product to industry.

Concurrently with development of the ROC, DARCOM development commands initiate evaluation efforts which include field visits to commercial user job sites, manufacturing facilities and the assimilation of data (test and actual) from all sources to determine the availability and suitability of an item to accomplish the task described in the ROC.

1. A draft specification is sent to potential suppliers that have been identified from a survey of commercial brochures and comparative data factors provided by commercial sources and maintained in technical libraries by developer commands. The specification contains the essential requirements that the end item must meet. It also contains a blank technical information package which is actually a questionnaire to which the manufacturer responds. In addition to technical characteristics of the equipment manufactured, such areas as component availability, supportability requirements, marketing information including dealer organization, etc. is examined.

From the foregoing it is evident that market research is active in all phases and is a continuing process even reaching into current production contracts. For this reason technical personnel regularly attend industry meetings, symposiums, and equipment displays to obtain information relative to new equipment and changes to old being developed by industry for the commercial market. Commercial brochures, periodical magazines, and other publications are continuously scrutinized for data on new equipment and changes or improvements to existing equipment.

Draft specifications are circulated to equipment manufacturers for comment to make sure that the specification adequately reflects commercial products and to determine which manufacturers are interested in offering their products to the government. Commercial user surveys must be re-evaluated when manufacturers materially change or product-improve an item previously surveyed by the government. Surveys are necessary when models are discontinued and/or replaced with new ones. Thus, market research becomes an integral part in each phase of the procurement process.

Col. Clyde Parker, Deputy Director, PRAM Program Office then gave a detailed explanation of the PRAM program. He presented some background on the program, its objectives, its limitations and how projects are selected and approved. He covered in some detail some projects that had CCAP implications.

The PRAM Office was established in August of 1975 by the Air Force Chief of Staff, to develop a focused effort to reduce current and potential Air Force Operational and Support costs and improve system effectiveness by improving Productivity, Reliability, Availability and Maintainability of operational systems. Col. Parker reviewed the project selection and approval process used by PRAM. He also described the management view of other than technical areas that are considered during the selection and approval process.

The distribution, by types of equipment, of more than 351 projects initiated so far, was shown. Currently there are more than 260 on-going projects. The cumulative net savings, that is the estimated savings minus the PRAM and implementation costs to date are about \$865 million. This represents a return on investment of better than 21:1.

Col. Parker then described in some detail six projects that were closely related to the CCAP objectives.

The following outline for discussion was developed by the group to serve as a basis for discussion.

#### OUTLINE FOR DISCUSSION.

##### BASIC ELEMENTS OF MARKET RESEARCH

1. On-going Program to Stay up with Capabilities in a Product Category
2. Commercial Sources to Meet Current Government Needs
  - o Normal/every-day products
  - o New systems
  - o Improvements required
  - o Vanishing sources

Elements to do this are:

- A. Clearly Understand Needs (User)
- B. Seek Out Potential Solutions (actively seek and listen)
  - o Inside Government (users and other agencies)
  - o Outside Government
  - o Creativity Close to Need (look for other approaches - open mind)
  - o How does Government Communicate Need (inside and outside)
- C. Evaluation of Alternatives

The recommendations of the workshop are shown on the following outline. The group also provided an annotated copy of their charter and draft of the DOD How to Buy Commercial Handbook.

A. Clearly Understand the Need

1. Breakdown:

a. Commodity, Normal/Everyday

i.e., Boxer Shorts

b. Capital Equipment, Technological Products

More need to focus on this area. The job of market research in this area is much more difficult than in Commodity. Resolve issues in this area and can extrapolate to Commodities.

c. Weapon Systems

Design to be tested with commercial equipment.

- 2. Need is in the user(s)
- 3. User is insulated from commercial suppliers
- 4. Need to efficiently couple user and supplier (industry spends twice as much in selling as in R&D)

<u>Government</u>	<u>Industry</u>
User User User User	Sales Engineer -front-line, tries to resolve customer need
Item Managers	Applications Engineer - backs up Sales Engineer technology oriented
Comments:	
Item Managers:	R & D
Person responsible for products-should thoroughly understand product-should thoroughly understand the real problem.	Comments:
If Item Managers are doing their job responsibility, this would allow for coor- dination of services.	Organized by product line

## B. Seek Out Potential Solutions

### 1. Sources of Data on Who Supplies What

- o Standard Identification Codes, Dun and Bradstreet,  
Dept. of Commerce
- o Buyers Guides
- o Industry STD Associations
- o Other Government Users
- o Commercial Users
- o Defense Integrated Data System  
(DLSC - Battle Creek, Michigan)
- o Consumers Union and Consumers Report
- o Government Preferred Item List

2. Who Should do it?

<u>Team</u>	<u>Item/Product Manager</u>
Responsibilities:	
Buyer	Understand User Need
Product Manager	Sensitive to User Need
Logistics	Technical knowledge/judgment & insight
	Knows suppliers and products
	Belong to relevant societies
	Do market research and make evaluation
	Lead evaluation and decide technical criteria

3. Ask Industry for Help - We are Willing to Help!

How to ask: Federal Register  
Trade Publications/CBD  
All industry meetings (GSA)  
Circulate performance specs and requirements  
Contractor Reading Room ROCS  
Publicize Contractor Reading Room

If a Product Manager knows the industry which supplies his products, he will be able to promulgate needs and accept inputs on problem solutions.

C. Evaluation of Alternatives

1. Criteria for Source Selection
  - o Performance
  - o Quality
  - o Service & Parts Capability
  - o Facility Inspection
  - o Financial Solvency
  - o Local Support
  - o Reliability/Maintainability
  - o Product Warranty
  - o Elements of Cost of Ownership  
(quick appraisal)

- o Industry-wide acceptance
- o Legal Limitations
- o Origin of Parts
- o Ability to Handle Demand

2. How to Evaluate

Financial Solvency - D & B  
Annual Reports  
S & P  
Commercial Credit Rating Houses

Product Performance - Government Labs  
Other Customers for products  
Test Data  
Get Bid Sample

Service & Parts Capability - On-site/responsive  
Time Commitment Policy

Industry-wide acceptance - Get lists of customers  
and visit or call them

3. What About Small Business?

- o More specialized products
- o Give support to big business
- o Good place to put funding for R&D products
- o Very innovative
- o Less overhead costs

4. Who should decide whether a technological product/  
supplier is qualified to be given a bid sample?

(determine acceptability of product & supplies)

Acceptable Suppliers	
Users/Engineer/User Rep	Team Effort
Product Manager	

Buy Commercial	Options Special Minor Modifications
Need for specific performance	Modify the requirements
Objective is to draw these together	These are ways you can move these objectives toward one another

#### Recommendations to Consider

##### A. Requirements of the people in Government

1. There is some discomfort with the term "market research"

Suggestions:

Market Search	
Market Analysis	
Market Assessment	(includes search for
Market Review	source and search for
Market Appraisal	product)

2. What people qualities are desired?

##### a. Professional Disciplines

Industrial Specialists (procurement)	
Item Managers	
Engineers	real understanding of
Design Specialists	product
Inventory Managers	

- b. Person doing market research must have awareness of the suppliers/products he manages in all facets (application, technology, etc.)

- c. Need someone who can establish teams with appropriate authority after initial planning is done.

##### Organizational ability

- d. The Market Research Manager must be:

- o dedicated to CCAP
- o able to make reliable decisions
- o able to overcome the undefined criteria for decision-making

- able to understand the system and organization

B. How should CCAP marketing research objectives be implemented?

Do We Need:

- A permanent focal point in DOD
- A permanent focal point in subordinate entities
- A central organization to guide market research
- Definitized decision levels established
- A centralized (DOD) repository and clearinghouse for market research case histories
- A retrieval system for case history information (who should have access)
- Training and publicity of concepts, philosophies, policies, etc. at all levels
- Regulatory issuances developed and distributed

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Market Research responsibilities at purchase organizations must be levied.

- Assignment of specific responsibilities must be developed.
- Individual case may be handled on an ad hoc basis using disciplines applicable to the specific case.

C. Impediments to Implementation of CCAP Market Research in the Federal Government

1. Negative attitudes of Government associates ("we have always done it this way")
2. Current regulations, rules, laws, etc.
  - ASPRS
  - FPRS
3. Organizational fragmentation
  - Multiplicity of buying/Management Organizations
  - MILSPECs/FEDSPECs and Standards and Standardization Program (current configuration)

4. Communication barriers between Government and Industry
5. Need to recognize variable capabilities of bidders to respond within specified time limits

D. Point of Entry for Offering New/Replacement Products

Government currently does not have single identified product managers for each product.

(Defense Integrated Data System at Defense Logistic Support Center in Battle Creek is one vehicle).

## **workshop C**

### **acquisition strategy**



**Chairman: Mr. Harvey J. Gordon, Deputy for Procurement,  
U.S. Air Force**

**Panelists:** OSD — Mr. Dale Babione, Director, Contracts  
and System Acquisition, OUSD (R&E)  
U.S. Navy — Mr. Joseph F. Grosson,  
Assistant Deputy Chief of Staff of Naval Materiel  
U.S. Army — Mrs. Sally Clements, Deputy for  
Materiel Acquisition  
Defense Logistics Agency — Mr. Pete Walton,  
Executive Director, Procurement  
Case Brief — Diesel Powered Mobile Electric  
Generator, Ms. Dorothy Solinski, AFLGY

## ACQUISITION STRATEGY

The workshop was opened by the Chairman who described the charter of the group and emphasized the need for serious consideration of the group's work.

Each of the panel members then presented a short paper after which the workshop divided into small groups, each charged with a portion of the larger task. Each of these small groups reported to the whole group and after much discussion, the following general comments and summary of discussions was developed.

### General Comments

- Government acquisition of commercial products should be conducted in a manner which closely approximates the practices of the commercial consumer under similar circumstances.
- The requisition strategy established for an item, i.e., consolidation of requirements by an inventory control point or local purchase by camps, posts, and stations, will determine whether the commercial market is entered at the wholesale or retail level.
- The commercial item vs. military specification decision must be made prior to preparation of the solicitation. The acquisition strategy builds on the results of the market research effort. If justification for purchase of a military specification item rather than a commercial item is to be required, this should be accomplished before the specification is prepared or updated and not become an issue after the purchase request has been released to procurement.
- The flow down of the commercial acquisition policy to prime contractors and their subs needs to be considered and addressed as appropriate in directives and regulations.
- DOD should publish policy, but procedures for implementing the policy should be left to the Services and Defense Agencies.
- Comments on draft chapter for proposed DOD manual.
  - Concept of draft RFP or Synopsis in the Commerce Business Daily to obtain industry comment should be included.
  - Positive procedures should be developed to insure consideration of small business/minority firms in commercial acquisitions.

-- The term "full and free" competition should be defined. Alternatively, the term "maximum practicable competition" as used in ASPR could be used.

-- Additional guidance is required in handling source selection actions in negotiated procurements and criteria for discussions in two-step procurements.

#### Production Description

#### Discussion

- The most appropriate type of specification and method of procurement depends on a variety of factors such as the item's complexity, the extent of maintenance support required, the availability of the item on the commercial market, and the number of producers. No one approach is appropriate for acquiring all commercial products and numerous conflicting factors must be considered as they apply to individual product types or groups. Sound judgment and common sense must be exercised on a case-by-case basis.

- The proposed Acquisition Act requires the use of functional specifications unless specifically waived. The Act is silent on purchase of commercial off-the-shelf products. The concept of purchasing products having proven performance and market acceptability needs to be given recognition in the Acquisition Act.

- Caution must be exercised not to overspecify or underspecify a requirement.

-- If overspecified, a commercial item may not be able to meet the requirement without redesign and redevelopment.

-- When specification writers are aware of commercial off-the-shelf equipment, caution must be exercised so that the specification does not describe a hybrid item having the best features from each available unit instead of the actual Government requirement.

-- Eagerness to procure a commercial item known to be readily available could result in the user receiving an inadequate product.

#### Recommendation

- The ASPR requirement for mandatory use of existing military or federal specifications should be eliminated.

- Repeated use of purchase descriptions should be permitted for acquisition of commercial products.
- The most appropriate type of specification depends on a variety of factors. Sound judgment and common sense must be exercised on an individual case-by-case basis.
- The proposed Acquisition Act should give recognition to the concept of describing products in terms of proven market acceptability.

#### Use of Warranties

##### Discussion

- Reliability Improvement Warranty (RIW) concept is not applicable to commercial off-the-shelf items.
- Commercial warranties are intended to achieve various purposes such as repurchase of a product, marketability, etc.
- Enforcement of warranty provisions requires a corporate memory within the Government to ensure that action is taken when an item fails. Also, a contractor's performance under his warranty should be a factor that is considered in making new contract awards.

##### Recommendation

- The appropriateness of a warranty must be considered on a case-by-case basis and use should be consistent with the ability of the Government to enforce its provisions.

#### Validation of Acceptability

##### Discussion

- When Government use of an item is similar to commercial application, no special inspection requirements should be imposed. Special testing may be appropriate when equipment will be exposed to an unusual environment.
- Commercial user considers factors other than price when selecting the items to be purchased. Government contracting officers should be able to make subjective judgments when awarding contracts for commercial items.

- Foreign market acceptability may become an issue when foreign firms are competing under the terms of an "offset program" or "memorandum of understanding".

#### Recommendations

- The most appropriate method for validating the acceptability of available products must be determined on a case-by-case basis.
- Recognition of the need for subjective judgments and support for the use of such judgments in the acquisition of commercial products should be obtained from the GAO.

#### Procurement Techniques

#### Discussion

- Procurement techniques currently available provide sufficient alternatives so that the optimum approach can be selected on a case-by-case basis.
- Multi-year procurement or standardization under the authority of a Secretarial Determination and Finding could be used when it is important that proliferation of equipment makes and models be minimized.
- Public Laws, Executive Orders, and Regulations which are not part of the normal commercial business structure may impede the acquisition of commercial products. A listing of some of the ASPR clauses that may be unacceptable in the commercial sector is provided in Figure 1.

#### Recommendations

- Authority should be sought for a "test program" which would exempt the procurement of commercial items from those contractual clauses which impose requirements or restrictions not found in the commercial sector. Also, the "test program" should permit contract awards to be based on subjective judgments. Approval/support from the Congress and the GAO would be necessary. The adoption of commercial buying practices will facilitate the implementation of the policy on acquisition of commercial products.
- If supported by the "test program", permanent authority should be sought which would permit the use of commercial buying practices for acquisition of commercial products.

FIGURE 1

LAWS, EXECUTIVE ORDERS AND REGULATIONS

<u>CLAUSE</u>	<u>ASPR REFERENCE</u>	<u>CITE</u>
1. Renegotiation	7-103.13(a)	50 U.S.C. App. 1211, et seq.
2. Contract Work Hours and Safety Standards Act - Overtime Compensation	7-103.16(a)	40 U.S.C. 327, et seq.
3. Walsh-Healy Public Contracts Act	7-103.17	41 U.S.C. 35, et seq.
4. Equal Opportunity	7-103.18(a)	Executive Order 11246 - Sep 1965 Executive Order 11375 - Oct 1967
5. Authorization and Consent	7-103.22	28 U.S.C. 1498
6. Listing of Employment Openings	7-103.27	38 U.S.C. 2012
7. Filing of Patent Applications	7-104.6	38 U.S.C. 181, et seq.
8. Military Security Requirements	7-104.12	
9. Utilization of Small Business Concerns	7-104.14a	15 U.S.C. 631
10. Small Business Subcontracting Program	7-104.14(b)	15 U.S.C. 631

FIGURE 1 (Continued)

<u>CLAUSE</u>	<u>ASPR REFERENCE</u>	<u>CITE</u>
11. Examination of Records by Comptroller General	7-104.15	10 U.S.C. 2313
12. Utilization of Labor Surplus Area Concerns	7-104.20(a)	Executive Order 10480 Executive Order 11051
13. Labor Surplus Area Subcontracting Program	7-104.20(b)	Executive Order 10480 Executive Order 11051
14. Equal Opportunity Pre-Award Clearance of Subcontracts	7-104.22	Executive Order 11246 - Sep 1965 Executive Order 11375 - Oct 1967
15. Utilization of Minority Business Enterprises	7-104.36(a)	Executive Order 11458 - Mar 1969 Executive Order 11625 - Oct 1971
16. Minority Business Enterprises Subcontracting Program	7-104.36(b)	Executive Order 11458 - Mar 1969 Executive Order 11625 - Oct 1971
17. Clean Air and Water	7-103.29	42 U.S.C. 1857 33 U.S.C. 1251
18. Affirmative Action for Handicapped Workers		29. U.S.C. 793
19. Preference for Domestic Specialty Metals	7-104.93(a)	

## Socio-Economic Factors

### Discussion

- Socio-economic programs are primarily those dealing with (i) purchases of products under national programs for Federal Prison Industries and the sheltered workshops of the Committee for Purchase of Products from the Blind and other Severely Handicapped; and (ii) purchases from small business and minority firms.
- Existing legislation (e.g., the Wagner-O'Day Act) will prevail over CCAP requirements. This is to say, that if an item has been placed on a mandatory procurement list it is exempt from the program. Further, if a "shop" wishes to provide a product, it may be added to the mandatory procurement list by the committee.
- Strict adherence to the existing CCAP definitions for: (i) "Commercial, off-the-shelf products"; (ii) "Commercial-type product"; and (iii) "Established commercial market acceptability" will result in a significant reduction in the Small Business Programs and the Small Business Production Base. The present definition for commercial off-the-shelf products calls for items that are sold in substantial quantities to the general public and/or industry at an established catalog or market price. This pricing-related definition must be changed. Many small firms have few if any sales to other than the Federal Government. Further, many firms with substantial commercial sales make these on the basis of contracted production rather than from an existing catalog. Similarly, the definition for established market acceptability requires items to be currently marketed in substantial quantities prior to its being acceptable to the Government. One of the avowed purposes of the Small Business Program is to assist the entry of new firms into the marketplace. Adherence to this definition would eliminate this aspect of the program and in the end result in a constriction of the procurement base of small firms. Clearly, these definitions will have to be revised to permit the offering of at least previously produced products with proven acceptability. Items which are essentially the old spec items would be acceptable. In the absence of a commercial production line, small business firms should be accorded the alternative of providing a bid sample which would be used to establish the acceptability of subsequent deliveries.

- The matter of new firm entry was not completely resolved. One approach could be the submission of bid samples with evaluation on a brand name or equal basis. It was also suggested that for small business firms, foreign military sales should be considered as evidence of product acceptability.
- Procedural aspects precedent to placement of an item into CCAP must consider the potential impact on small business. During the market research phase, the activity small business advisor and the assigned SBA representative must be consulted to determine the impact of any resulting action on small business firms and minority firms. Should a potential significant adverse impact be found, e.g., elimination of a set-aside or 8(a), the item should be excluded from CCAP. In the event of disputes between the SBA and the procuring activity, the existing set-aside appeals procedures should be followed.

#### Recommendations

- Acceptable products should be defined as "previously produced end items having a record of proven performance and acceptability by users".
- During the market research phase, the activity small business advisor and the assigned SBA representative should be consulted to determine the impact of any resulting action on small business firms and minority firms.
- In the event of disputes between the SBA and the procuring activity during the market research phase, the existing set-aside appeals procedures should be followed.

## workshop D

### logistics



**Chairman:** U.S. Navy — Mr. J. J. Genovese,  
Assistant Deputy Chief of  
Naval Materiel, Logistics

**Panelists:** OSD — Mr. Robert Rozycki, Director, Supply  
Policy and Programs, MRA&L  
Defense Systems Management College — RAdm R. G.  
Freeman, Commandant, Ft. Belvoir  
U.S. Army — Mr. James F. Maclin, Assistant  
Deputy for Materiel Readiness  
U.S. Navy — Mr. Herbert McCarthy, Assistant  
Deputy Commander of Plans, Policy, and  
Programs Development  
U.S. Marine Corps — Mr. Vince Walls, Assistant  
Deputy Chief of Staff for Installations &  
Logistics  
Case Brief — UV-18 TWIN OTTER — LTC David Powers,  
USAF

## LOGISTICS

The workshop divided itself into 5 subgroups, each to explore a particular area of the logistics problem. A brief report of the discussion and recommendations of each of these subgroup reports are followed by a summary of the finds and recommendations of the entire workshop. A brief summary of the paper, Reliance on Commercial Distribution Systems for Support of Commercial Items Within the DOD, presented by Mr. Robert F. Rozycki precedes the workshop report.

### SUMMARY OF CISP PAPER:

Mr. Rozycki discussed the role of Commercial Item Support Programs or CISP in duplicating commercial distribution systems for the supply of commercial items whenever feasible and when there is no adverse impact on readiness.

He noted that in the past the emphasis was on purchase price when making supply support determinations. Under CISP, the total or "landed" cost, that is the total cost to provide an item to its user will be considered. He emphasized that the impact on military readiness of all alternate supply and procurement methods will be carefully considered. The achievement of an acceptable level of military readiness will override all other factors. Initially the main concentration is being placed on items that are most susceptible to commercial support. CISP involves only secondary items not identified by Military or Federal specifications. In conclusion, Mr. Rozycki indicated that they were open to all views from all sources and encouraged a contribution of opinion.

### DISCUSSIONS AND RECOMMENDATIONS

#### SUBGROUP 1

TITLE: Is Going Commercial Good for Logistics Support?

DISCUSSION: In discussion of this question numerous serious problems and pitfalls such as standardization, deployability, life cycle use, reliability, configuration, training, number of interface with supplies, must be addressed when acquiring and supporting a commercial product. However, in all cases, it was logically concluded that, in general a well-structured, planned and executed acquisition of commercial system products program would prove beneficial for logistics

support in that it would lower life cycle cost, by reducing government manpower, facilities, and support requirements while stimulating competition and enhancement of the industrial base.

However, to achieve these objectives the following is necessary:

- (a) a clear general overall DOD policy statement by acquisition category (major, non-major systems and all other acquisitions) that will ensure due consideration is given to the user of commercial items to meet government requirements.
- (b) early application of logistics support analysis techniques to generate and evaluate trade-off options available. These options must take into consideration the full range of logistics considerations over the life cycle of the product.
- (c) the establishment of some general measures of goodness and acceptability that can be utilized by the service/agencies in conducting life cycle cost benefit analysis trade-off.
- (d) that commercial product acquisition be part of the acquisition strategy of products to fill government needs.

RECOMMENDATIONS: This work group recommends that:

- (a) DOD develop and issue an overall policy directive by acquisition category regarding the use of commercial system products. That this statement be general in nature to provide guidance that formally establishes the policy, procedures and methodology in the present Commercial Commodity Acquisition Program and permits each component maximum flexibility in adapting specific methods of implementation.

#### SUBGROUP 2

TITLE: Maintenance

DISCUSSION: The maintenance panel agrees with reliance on the commercial sector for maintenance services where this capability can provide rapid response to service user needs. Reliance on commercial maintenance services support at the operational unit level is not considered desirable or practical as a general rule. Operational units must normally maintain levels of maintenance capability commensurate with their assigned missions.

Readiness requirements make it essential to sustain the levels of operating and maintenance personnel proficiency that will be required in combat or under other operational conditions.

The extent of reliance on the commercial sector will vary depending on the type of service required, the complexity of the commercial product and the essentiality of the product to the current operational mission of the requiring service. These factors become paramount when considering the use of commercial maintenance, supply and distribution services of commercial suppliers. The existing capability and performance history of the commercial suppliers should be a significant factor in assessing the risk involved in reliance on contracting for these services.

RECOMMENDATIONS: The Maintenance Panel recommends the following factors be considered in the establishment of DOD Commercial Commodities Acquisition Program.

A. Maintenance Services

1. Recognize that there must be provisions for organic maintenance capability for deployed units and the need to augment this capability in time of war.
2. Contractor maintenance support and distribution system should be used within CONUS bases unless organic maintenance can be justified by readiness or economic considerations.
3. Utilize contractor maintenance and distribution overseas when feasible, cost effective and consistent with 1 and 2 above. A capability for transition to military distribution system in time of war must be retained.
4. Maintain some system flow to assure wartime supportability.
5. Recognizing the need for human interface and the need for operational readiness, structure contractor support to preclude the need for operational units to interface with multiple contractor support systems. This calls for parts support at wholesale or intermediate

levels and contract maintenance through specified maintenance points. Contractor support must be geared to interact with the normal organic support system.

6. Budgeting for maintenance of commercial products by commercial suppliers must be recognized as a unique requirement supporting the need for multi-year funding to recognize the long term commitment between the services and the suppliers.

#### COMMERCIAL TECHNICAL MANUALS

The DOD currently has a spec MILM-7298C which addresses the minimum needs in procurement of operator and maintenance manuals. However, this specification, which has been coordinated with that segment of industry traditionally supplying the DOD, should be provided to a wider industry base if a significant increase is expected in the introduction of commercial hardware into the DOD Inventory. Commercial suppliers should recognize that DOD components do have needs in the operator and maintenance manuals area and consider this factor in offering their products to the services.

#### DRAWINGS (When Required)

The introduction of commercial products in the DOD inventory should be made with the clear understanding that commercial product lines will change to meet market needs. This requires special considerations be given by the acquisition agency and the commercial suppliers on information/data needed to support commercial items when the ownership life cycle of the service extends beyond the product line life in the commercial sector with resultant nonavailability of contractor supply and maintenance support.

#### TOOLS AND TEST EQUIPMENT

Provision of tools and test equipment with commercial product lines is dependent on the maintenance approach to be used. It is highly desirable to use tools and test equipment currently in the DOD inventory for that part of the maintenance to be performed by the services.

### SUBGROUP 3

TITLE: Supply Support - Policies on Reliance on Use of Commercial or Military/Agency Distribution Systems for Item Supply Support.

DISCUSSION: The Commercial Item Support Program (CISP) has four basic objectives:

- a. To achieve maximum use of commercial distribution channels.
- b. To reduce the number of commercial items being stocked and handled in DOD wholesale distribution facilities.
- c. To achieve economies in product acquisition and operating costs.
- d. Accomplish the above objectives without degradation of military readiness.

Our primary objective will be to maximize the use of commercial distribution channels. However, it is envisioned that the logistical requirements of individual items will in some instances dictate the need for utilizing the Military/Agency distribution systems or a combination of both the Military/Agency distribution systems and the commercial distribution systems. Further, the need to hold war reserve stocks to support immediate requirements of the military, the requirement for stock availability to support high priority and urgent mission-essential peacetime needs, and the supply support requirements for item quantities which fall below the vendor's minimum order quantity, indicate the need for a system that does not rely exclusively on the use of the commercial distribution channels.

Of primary consideration in maximizing the use of commercial distribution channels is the assurance that adequate inventories are available in distribution channels to support military requirements, that the commercial distribution channels possess the ability to respond to requirements on a timely basis, and that economic analysis for higher demand dollar value items reflects that the use of such commercial distribution channels is the most cost-favorable approved to providing item support.

The range of items requiring support within the Department of Defense include items that have peculiar commodity characteristics, that dictate the use of special and unique item management actions. In view of the variety of management actions required the establishment of policies relating to the reliance on commercial or military/agency distribution channels must of necessity be broad in nature.

RECOMMENDATIONS: That in furtherance of the Office of Federal Procurement policy objective of maximizing the use of commercial distribution channels the following policies be adopted:

- a. Commercial distribution channels will be utilized for commercial item acquisitions providing that such channels can assure a stock availability performance comparable with that currently maintained by the respective DOD commodity, can assure an ability to respond to user requirements in timeframes comparable to those currently established in military standard requisitioning and issue procedures (MILSTRIP), and providing that the total costs of using such commercial distribution channels is cost-favorable in comparison to the total costs (1) currently incurred in military/agency distribution systems.
- b. Military/Agency distribution systems will be utilized for those acquisitions for which maintenance of stocks in such distribution systems is essential to military readiness, when commodity-peculiar characteristics dictate the need for military/agency distribution system stockage and when use of the commercial distribution channels is considered inadequate in terms of material availability or timeliness of support and the military/agency distribution system is determined to be the most cost-favorable approach.
- c. A combination of both commercial distribution channels and military/agency distribution systems may be utilized when it is necessary that a part of the total item support capability must be retained in military/agency distribution systems, e.g., to assure availability of adequate stocks to satisfy war reserve requirements or mission essential high-priority peacetime requirements, and to maintain item support for quantitative requirements that do not merit vendor's minimum order quantities.

- d. Commercial packaging, packing and marking will be utilized to the maximum extent in all acquisitions. Military-peculiar markings will be utilized only when it is considered essential to maintain item identification through military/agency distribution systems.
- e. When existing policies/procedures are inconsistent with commercial item procedure policies they will be appropriately modified.
- f. Item support for those quantities acquired totally or partially through authorized socio-economic programs will be provided through the military/agency distribution system unless the socio-economic program source is agreeable to establish commercial distribution channels.
- g. Greater reliance will be placed on contractor identification of items supplied in order to lessen the need for national stock number identification of commercial supplied parts/items. In this context, OSD must review Public Law 436 regarding the Federal Catalog Program to determine any necessary changes to the law and to pursue these changes.
- h. Implementation of logistical support policies for the use of commercial or military/agency distribution systems will be established on a priority basis beginning with implementation of those items which are readily available in the commercial market and have the least impact on mission readiness.

#### SUBGROUP 4

##### TITLE: Training

DISCUSSION: Training within a commercially oriented environment is affected by several factors in the following ways:

ENVIRONMENT - The life of equipment is growing - a 20-25 year life span means that the various sub-systems and components are subject to numerous changes/improvements. Thus, parts of the same system or platform will be a complex mixture of today's state of the art plus those changes that will occur over the next 20-25 years or better.

Growing complexity of equipment is not being matched by growing skills of the service members, particularly in an all-volunteer environment and during a period where military service is not a strong magnet for the young people of today. As a result, alternative sources of assistance are needed.

Neither the Viet Nam nor the Korean experience provides a sound basis for determining training requirements. Future planning cannot be based on having an invulnerable 12,000 mile pipeline and "around the corner" maintenance availability. The training must be such that it will be successful in any operational environment.

CONCEPTUAL CHANGES - Training depends on philosophical and actual changes in both distribution and maintenance systems. Reliance on commercial distribution systems eliminate some training requirements but, of greater significance is reliance on commercial sources of maintenance. Factors to be considered include reductions of organizational level (change-out in lieu of repair), of intermediate level (ship direct between user and depot) and reduction of in-house depot maintenance in favor of commercial support.

EXPERIENCE - Past experience has shown no significant problems in using a mix of in-house, vendor and third-party maintenance.

RECOMMENDATIONS:

- 1) Review existing regulations to allow flexibility of increased reliance on the private sector.
- 2) Develop a matrix/decision tree for determining maintenance source.
- 3) Accept commercial practice for training when commercial products are used.
- 4) Incorporate training options in Logistics Support Plans.
- 5) Include options for contractor, third-party, and in-house training including both formal classroom and OJT.

## SUBGROUP 5

TITLE: Configuration Management of Items Which are "Commercial by Design"

DISCUSSION: OM&B Memo of 24 May 1976 requires that the Government purchase commercial, off-the-shelf products when such products will adequately serve the Government's requirements, provided such products have an established commercial market acceptability. Commercial products applicable to this policy requirement are wholly design controlled by industry sources including the form/fit/function and configuration of internal parts.

The degree of configuration management or change control of commercial items has been dependent upon the operational essentiality of the items and the logistics support requirements. The government has imposed MIL-STD-481 (Configuration Control Engineering Changes) where essential in the procurement of commercial items. MIL-STD-481 is used in contracts involving privately developed items, when the procuring activity has determined that application of change control to such items is necessary.

DOD Directive 5000.1 provides very little policy guidance for the use of commercial items in acquisition of major defense systems; it mentions design change in very broad terms. The DOD directives on configuration management (DODD 5010.19 and DODI 5010.21), which are currently being upgraded by the Defense Materiel Specifications and Standards Office (DMSSO) as part of the DOD Standardization Plan for Configuration Management Documents, do not provide adequate policy guidance for commercial items. MIL Handbook 248 (Tailoring Guide for Application of Specifications and Standards), which is currently undergoing revision under the sponsorship of the DMSSO, could be the vehicle for providing detailed guidance on any configuration management limitations for commercial equipments/items.

Subparagraph 2-3c of the Joint Service Publication entitled "Configuration Management" (AR 70-37; NAVMATINST 4130.1A; AFR 65-3) provides guidance for "Privately Developed CI's (Configuration Items)." That guidance states that when the government purchases design data on such items which the government intends to repair, that the configuration within the items may not be changed at the producer's discretion unless the government waives.

This guidance tends to inhibit the use of commercial equipment because many producers will not provide a detailed design package for commercial items.

In summary, MIL-STD-481 provides the Military Departments a suitable vehicle for configuration management of commercial equipments/items where essential. However, the policy guidance for configuration management of commercial equipments/items appears to be inadequate.

RECOMMENDATIONS: The DMSSO provide guidance for the inclusion of appropriate policy for commercial equipments/items in DODD 5010.19, DODI 5010.21, and the Joint Service Publication entitled "Configuration Management." Additionally, guidance should be provided by DMSSO for inclusion in MIL-Handbook of specific details on configuration management of commercial equipments/items.

The policy guidance should tend to constrain government configuration management requirements being placed on contractors for those equipments/items which are commercially designed and bought to form/fit/function values.

#### A. Summary of Findings

Going commercial can offer opportunities for improved efficiency in logistics support. However, in order to recognize these opportunities, examination of logistics support requirements, and alternatives for satisfying these requirements, must be made. The specific methods for logistics support should be determined prior to acquisition of the commercial end item.

As a general rule, it is neither practical nor desirable to rely on contractors for direct logistics support, particularly supply and maintenance of operational units. The extent of reliance on the commercial sector will vary depending on the complexity of the commercial product, the type of service required and the criticality of the item to the operational mission of the using unit. In any event, it is essential that operating and maintenance personnel proficiency be sustained at the level that will be required in combat or under other operational conditions.

Producers of commercial off-the-shelf products provide varying degrees of supply support to their customers. User requirements must be paramount to include consideration of readiness, war reserve stocks and operating environment.

Depending on the specific circumstances, supply support arrangements for commercial end items can range from maximum reliance on commercial distribution (e.g., support through dealerships), combination of military and commercial distribution (e.g., area/regional military activity procurement), to complete support through service/agency distribution.

In some instances, acquisition of commercial off-the-shelf items will precipitate requirements for training of service operating and maintenance personnel. Acquisition planning must include determination and selection of options for contractor, third-party and/or organic training, both formal and classroom and on the job.

In that the planned service life cycle for a commercial off-the-shelf item may extend significantly beyond the normal commercial product line life, some degree of configuration control and management is required. The current DOD policy guidance for configuration management of commercial equipments/items appears inadequate.

#### B. Summary of Recommendations

An overall DOD policy directive regarding the use of commercial systems and products is required. This directive should recognize the need for maximum flexibility for service adaptation of specific methods of implementation.

There must be provisions for sustaining organic maintenance capability to support deployment and combat operations. Contractor maintenance support can and should be used in most CONUS situations and in some overseas areas. In all cases, contractor support must be geared to interact with the normal organic support system. The requirement for long term commitment and multi-year funding must be satisfied when entering into contractor maintenance support arrangements.

Commercial supply distribution systems should be used when determined after careful analysis, to be cost effective. Policy issuances should recognize the need for exceptions to accommodate military uniqueness.

Training options should be included in logistics support plans for commercial products. Existing regulations must be reviewed and revised as necessary. As a rule, commercial practices for training should be accepted.

Policy guidance for configuration management of commercial items is required. The guidance should tend to

constrain the extent of configuration management requirements imposed on manufacturers of commercial items bought to form/fit/function values.

# workshop E

## product evaluation



**Chairman:** Rear Admiral Robert W. Watkins  
Executive Director of Quality Assurance,  
Defense Supply Agency

**Panelists:** U.S. Army — Mr. Seymour J. Lorber, Director  
of Quality Assurance  
U.S. Navy — Mr. Willis J. Willoughby,  
Assistant Deputy Chief of Naval  
Material (R&E)  
Industry — Mr. John W. Tschantz, Manager,  
Defense Products, Caterpillar  
Tractor Company  
Case Brief — Petroleum, Fuels & Lubricants,  
Mr. Ron Gomes, Defense Fuel and Supply Center,  
Defense Logistics Agency

## PRODUCT EVALUATION

Workshop E, which was concerned with Product Assurance as related to CCAP, provided the following inputs and considerations for the proposed DOD Handbook.

- The successful handbook must reflect, and come to grips with many of the issues raised in Questions 1-11 of Workshop E.
- A key issue is to be specific on the type of products CCAP is addressing. Not all commercially available products lend themselves to a 100% CCAP philosophy. A breakout is needed perhaps starting with consumable vs nonconsumable, repairable vs nonrepairable and becoming more detailed.
- The emphasis on NATO standardization is important enough to be reflected in this handbook.
- Subject 2 deals with reliance on commercial market acceptability as a basis for avoidance of special QA arrangements currently required by procuring agencies. We would like to see if we could back up one step and consider allowing bids on selected commercial products only from those manufacturers who have a stake in a "brand name" commercial item which enjoys a significant market and consumer acceptance.

This would preclude bids by suppliers of commercial products which are not judged by the commercial market to be very good as well as those who while having the plant capacity have yet to demonstrate that they can in fact make an item that will prove satisfactory. This need not have significant adverse impact on small business and 8a programs.

- Need for commercial market acceptability detailed definition.

How do you measure "total cost" in evaluating bids in such a fashion that your decision can withstand protests of unsuccessful bidders (in count)?

- Outline action to change ASPR and other impacting regulations.

- Provide usable formula for life cycle costing evaluations which will be approved by Contract Board of Appeals.
- The CCAP effort has to be considered a part of the DOD Standardization Program. The DOD program must encompass it, not be counterproductive to it.
- Evaluate important factors which may not be readily quantifiable and which should be performed by a panel of acknowledged, hopefully impartial, experts, thus lessening vulnerability to contentions of bias.
- At this point, we can't add any considerations to the proposed manual. However, we would like to stress the consideration of price vs subjective elements involved in the item purchased. We believe in order to have an ideal situation DOD must have a point set up for such things as safety, reliability, ease of use, support and many other elements that are pertinent to the item selected. The rating should be specified in the specifications to allow the offerors the knowledge of how they will be selected.
- Recognize impossibility (and undesirability) of trying to prepare detailed guidance procedures to cover all varieties of CCAP items. Rather provide general guidelines within which each commodity specialist can meet intent of CCAP concept.
- Acknowledge CCAP intent to eliminate unnecessary requirements BUT do not forget to note that Government has the same rights as any other consumer and must be allowed to act as such, e.g., stop buying from poor producers.

General Notes:

- Highlight fact we must take same warranty (written or unwritten) as commercial customer.
- Government must use occasional random inspection to check that contractor is continuing to meet original requirements.
- Downplay reliability for CCAP items. Not enough real data. Statistical testing is long and costly and rarely done.

- Require supplier to supply same item for duration of contract. DPSC (C&T) does not plan on doing this.
- For first-time acquisition of commercial items, a history should be gained by the purchases - or collectively between the acquiring activity with the user - but not by the user alone.
- Define acceptable market research and life cycle costing techniques to be employed in the establishment of an acceptable contractor and/or decision to negotiate warranties. Cost effectiveness of warranties must similarly be demonstrated and substantiated with universally established and accepted methodologies.
- Warranties should be considered in two distinct and separate areas. Namely, no warranties in combat utilization area and warranties for high volume traceable item.
- That life cycle as applicable to warranties be described in detail.
- Cost effectiveness of warranties be carefully considered, with certain select item being analyzed to determine feasibility plus cost.
- At the U.S. Army Aviation R&D Command a new initiative has begun, referred to as RBQ (Reliability Based Quality). This new approach depends on the contractor/MF6 machine defects data. These data are used to evaluate the repeatability of each machine operation so that the results can be used to tell whether the product has been manufactured according to the design intent. In our effort we have scoped it to just the flight critical parts. It certainly would be helpful if prime contractors (commercial) would be requested to submit these data to the procuring activity so as to determine if he can in fact manufacture his product.

#### ITEM #1

TOPIC     Should DOD relax or modify existing QA and RAM policies and procedures to enhance the acquisition of commercial off-the-shelf items? Are relaxed requirements applicable, for example, to noncombat only items, generic classes of items, or dependent on the end use?

**DISCUSSION:** Relaxed requirements are not intended to reduce product quality and reliability but rather to redirect the responsibility to the contractor who has proven his own QA procedures by producing one of the better products on the commercial market. In addition, a strong warranty makes it to the manufacturer's advantage to produce quality material. The ability of the first Government user to implement the warranty makes him a part of the QA function.

QA efforts may need to vary with generic classes and for some uses should be determined on a case-by-case basis. Contractor experience could also modify normal QA requirements either to relax because of historically favorable experience or be more comprehensive in those instances where the supplier's past performance indicates concern.

QA efforts should not need to be modified for combat versus noncombat items.

Existing policies:

DOD Directive 4155.1 Para Vi B, Concepts. Functional organizations creating technical criteria are responsible for translation of functional requirements including reliability and maintainability into quantitative requirements that can be contractually specified with appropriate demonstration.

ASPR 14-201 Organization Responsible for Technical Requirements. (a) The organization responsible for technical requirements is responsible for prescribing inspection, testing or other contract quality requirements that are essential to assure the integrity of products and services.

ASPR 1-1102 Qualified Products, Responsibility for Qualification. A Federal or Military Specification is the only medium for establishing a requirement for qualification. The preparing activity identified in the specification is responsible for qualification.

**RECOMMENDATION:** These policies should be modified to permit maximum acquisition of commercial products based upon the manufacturer's product description and his proven QA procedures to produce a quality product acceptable

in the commercial marketplace without the need for government technical specifications.

Proposed changes

DODD 4155.1 (currently under revision)  
A paragraph should be contained in this directive substantially as follows: Review of user needs shall be conducted to determine suitability of commercial products for military use, and contractual application of manufacturer's product description.

ASPR 14-201 Add the following: Contract technical requirements for available commercial products which are suitable for military use shall be in accordance with the manufacturer's product description. In determining suitability the following factors shall be considered:

- (i) Mission and environmental profiles
- (ii) Preprocurement product evaluation
- (iii) Manufacturer's warranty
- (iv) Cost effectiveness
- (v) Product history
- (vi) Maintenance and repair estimates
- (vii) Other available data

ASPR 1-1102 Develop a subsection of the ASPR setting forth requirements for the acceptance of commercial products based upon user needs similar to this subsection.

Proposed changes

DODD 4155.1 N/C

ASPR 14-201 N/C

ASPR 1-1102 Develop a subsection of the ASPR setting forth requirements for qualification of commercial products similar to this subsection.

ITEM #2

TOPIC: Does policy allow for total reliance on the Commercial market acceptability of products (together with acceptance inspection) and thereby avoid application of special contractual means that assure quality? If not, what is the point of departure? Are there any general rules that may be applied?

DISCUSSION: There may be a conflict in "Total Reliance" on the commercial market because it eliminates potential bidders in the marketplace who have not demonstrated success in marketing the product over extended periods.

RECOMMENDATION:

- (1) Federal procurement and legal types review government procurement policy to ascertain if commercial market acceptability as defined in CCAP's is permissible.
- (2) If determined to be permissible, then guidelines should be developed to define commercial market acceptability.
- (3) Acceptance inspection criteria should be developed.

ITEM #3

TOPIC At what point does the standardization program inhibit the acquisition of commercial off-the-shelf items? How can achievement of both objectives best be accommodated? Is it desirable that exceptions be granted in standardization requirements?

DISCUSSION: The standardization program can inhibit the acquisition of commercial products in two respects:

First, through the imposition of non-essential and unnecessarily restrictive requirements through the vehicle of the specification which, in addition, may not reflect the state of the art of the industry;

Second, a principal objective of the program is to prevent the proliferation of items in the military supply system and to reduce the numbers of these items to the maximum extent practical. This is achieved in part through the control of the indiscriminate selection and use of those commercial products which have attendant maintenance and logistics impact, i.e., spare parts, thus constraining the proliferation of these parts in the supply system. The uncontrolled selection and use of a variety of the same repairable commercial product

does contribute to this unnecessary proliferation. The constraint on proliferation is a desirable feature of the standardization program.

RECOMMENDATION: The DOD should improve its management, surveillance and control over the preparation and use of specifications for truly commercial items to assure that these documents reflect requirements that are no greater than accepted commercial practice, do not impose unduly restrictive requirements and are maintained current with the state of the art. In that regard, both the DOD and the industry should place continued emphasis upon the development, adoption and use of industry standards which are mutually acceptable and which promote the utilization of the commercial industrial base.

The DOD should capitalize upon those existing and proposed acquisition methods that exploit the use of commercial products while not impacting upon its logistics system. This should include the further utilization of contractor maintenance capabilities, the use of existing contractor logistics systems and the use of the "black box" concept, i.e., form, fit and function in writing specifications for commercial items.

#### ITEM #4

TOPIC      Adequacy of policy governing reliability improvement or other warranties in lieu of application of Q.A. or RAM policies and procedures for commercial improvement.

#### DISCUSSION:

1. Among the considerations impacting upon warranty policy the following are considered most significant:
  - A. Areas in which warranties should not replace Q.A. and RAM
    - (1) Combat utilization
    - (2) Support of critical or complex (costly down time or replacement) systems
    - (3) Sharability is uncertain, especially in cases of highly dispersed issues
    - (4) Contracts with marginal suppliers

B. Areas in which use of warranties may replace Q.A. and RAM.

- (1) High volume items with traceability to manufacturing source (low unit cost but high overall cost).
- (2) High dollar items with traceability to manufacturing source (high unit cost, low volume, high overall cost).

(In both of the above cases, conditions described in A. above should not be prevalent.)

2. Advantages of warranties include:

- A. Hedge against maintenance and repair cost.
- B. Life cycle cost management facilitated and overall improved reliability.
- C. Motivate contractors to improve product quality.
- D. Reduces military manpower requirements.

3. Disadvantages of warranties include:

- A. Costly (could be considerable).
- B. Difficulties in resolving disputes.
- C. Complexities of governmental administration.
- D. RIW techniques still experimental.

4. A distinction must be made between the concepts of warranty and guarantee respectively:

**Warranty:** A policy by which consideration or compensation is accorded to the purchaser according to stated provisions, the applicability of which is determined by the buyer.

**Guarantee:** A policy by which consideration or compensation is accorded to the purchaser according to stated provision, the applicability of which is determined by the seller.

A mutually acceptable authority should be established to assign liability for defective material. Economic compensation or penalty should be predicated upon this adjudication.

CONCLUSIONS:

Effective application of RIW's in lieu of Q.A. and RAM programs is a function of commodity, product, supplier and application. Accordingly, each case must be independently assessed for feasibility. An analysis of life cycle cost tradeoffs, i.e., Q.A., RAM, organic maintenance vis a vis warranty policies, must be executed prior to consideration of warranty application. It is quite probable that a modified warranty clause may be needed if ASPR is to provide responsive guidance in warranty issues.

RECOMMENDATION:

1. Review ASPR for sufficiency of warranty clauses.
2. Propagate information concerning use of warranty clauses.
3. Develop guidance materials for determination of warranty clause applicability.

ITEMS # 5 & 10

TOPIC Commercial Product Evaluation Techniques

DISCUSSION:

The procurement organization shall have the authority to select the best method or combination of methods to effectively evaluate commercial products, both prior to procurement and subsequent to solicitation. It is recognized that there is no one best method applicable to all products or commodity areas. Methods may be related to the safety, criticality, health, cost and/or performance.

It is desirable that these decisions be made prior to the start of the procurement process.

RECOMMENDATION: When this can be done the following factors should be considered:

1. Performance data acquired from the manufacturer of product and/or from appropriate testing organizations shall be evaluated and ranked.
2. Samples of commercial products considered for repetitive procurement may be acquired for examination or testing to determine acceptance. Consideration should include:
  - (a) compliance with industry standards, if any
  - (b) manufacturer to provide his technical data for the product
  - (c) samples of all known suppliers should be included.
3. In addition to other data, the manufacturer's commercial warranty data should be acquired. If industry warranties are not uniform, or are inadequate, minimum warranty requirements should be established.
4. Destination acceptance procedures should be utilized to the extent feasible for commercial off-the-shelf items. In some instances, it may be necessary for normal destination acceptance procedures to be expanded to cover other than count and condition.
5. Obtain from the manufacturer his commercial assurance regarding service he will perform during warranty period and his responsiveness in fulfilling services (where appropriate).
6. Requests For Proposals/Invitations for Bid shall include information which will be used in evaluation of offers received. These should include, but not be limited to:
  - a. manufacturer performance data
  - b. product samples
  - c. warranty requirements
  - d. acceptance procedure

ITEM # 6

TOPIC Screen Suspect or Marginal Offers/Products.

DISCUSSION:

- a. Screening implies an ability to disqualify offerors prior to an actual procurement. Poor performers in the past may be able to perform well on future awards due to changing circumstances. The basis for eliminating potential suppliers may be contrary to public policy and law and would be extremely difficult to substantiate.
- b. Small business and other firms require special consideration.
- c. Quality performance data is not effectively processed and utilized in connection with new awards.
- d. The government problem of screening is going to be difficult as proof of poor performance will be required to deny an award. And ... SBA procedures will certainly influence screening procedures.

RECOMMENDATION: The following policy should be followed to preclude DOD from selecting a marginal producer. A specified check list should be developed which should encompass a sound financial position, a past performance record which would substantiate a good quality product, a pertinent testing program, qualified manpower resources and a sound manufacturing program.

ITEM # 7

TOPIC Describe and evaluate the contractor's past delivery support throughout the product's life.

DISCUSSION: In the evaluation of a commercial item's suitability for use in a DOD environment, the procuring function must consider the seller's capability to provide spares, where applicable, for the projected life of the product. If the product is to be used both CONUS and OCONUS, the vendor's ability to provide spares through his normal supply channels

and over wide geographical areas shall also be an evaluation factor. If the user's requirements would benefit from vendor services, the vendor's ability to provide that service must also be considered in the selection process.

RECOMMENDATION: Require that a supplier's capability to provide spares support for his equipment be made a factor in the selection criteria for a commercial item.

ITEM # 8

TOPIC Evaluate Problems and Benefits from Normally Requiring Two or More Sources vs Single Source

DISCUSSION:

1. MULTI-SOURCES (Two or more producers)
  - a. Advantages:
    - (1) Provides for competition among suppliers.
    - (2) Tends to reduce price through bid procedures.
    - (3) Promotes cooperative attitude between the producer and Government.
    - (4) Induces incentives to advance the technology.
2. SINGLE-SOURCES (one producer)
  - a. Advantages:
    - (1) Provides shortened initial delivery dates.
    - (2) Less risk due to proven quality through commercial acceptability.
    - (3) Assures Logistics interchangeability (standardization).
    - (4) Provides consistency in continued production/deliveries.
    - (5) User can select "Brand Name" desired.

RECOMMENDATION: Acquisition strategy should be reviewed on a case-by-case basis in the procurement of commercial material. Existing procedures and regulations permit continued DoD utilization of commercial supplies and services. Accordingly, acquisition strategies should be tailored to take advantage of commercial material of known product quality.

ITEM # 9

TOPIC Identify and compare acceptance techniques.

DISCUSSION: Identity and comparison of acceptance techniques to be utilized on procurement of military peculiar vs commercial products must be based on the following assumptions:

- (1) The using activity ascertains that its need can be satisfied by commercially available products.
- (2) That those commercial products selected have been adequately evaluated and determined to be capable of satisfying the user's need.
- (3) That the item, by virtue of its being a commercial product, will be produced for the government by the same processes and controls that have facilitated its achievement of commercial market acceptability; i.e., the same assembly line, the same quality assurance system, off the same shelf.
- (4) The manufacturer is constrained by his commercial customers to produce a quality product in order to maintain market acceptability.
- (5) The degree of risk to the government will be the same as that of the private buyer.

Based on these assumptions it is believed that:

- (1) Additional controls, i.e., source inspection, destination inspection and/or testing need not be initially imposed.

- (2) Manufacturers may reject the imposition of additional inspection controls as unnecessary and interfering.
- (3) User feedback becomes more important in determining need for corrective action since source and destination inspection data has been obviated.

RECOMMENDATION: Procurement of commercial items should result in a general relaxation of source and destination inspection controls due to expected acceptable levels of quality and inherent lack of criticality of product application. Therefore guidelines should be established that reflect the philosophy that commercial items and the manufacturing processes by which they are produced do not require the same levels of control that military peculiar, mission essential, specially manufactured to detailed specification items warrant to achieve the necessary degree of user confidence.

ITEM # 10 See Item #5.

ITEM # 11

TOPIC Use industry standards for commercial items to set minimum quality and performance criteria.

DISCUSSION: The DOD should use industry standards for commercial items to set minimum quality and performance criteria. Use of industry standards reflects what is available in the marketplace, establishes minimum quality and performance criteria, eliminates duplication of effort, offers broadest possible competition in commercial arena, and enables DOD to concentrate its resources on military peculiar needs. Industry standards have a broad range of acceptance and use.

RECOMMENDATION: Military and industry should reemphasize the need for development, adoption and utilization of industry standards in accordance with DODI 4120.20.

## APPENDIX

Workshop A - User Needs

Chairman: Mr. John E. Harris  
U. S. Army  
TRADOC  
ATCD-SM  
Ft. Monroe, VA 23651

Panelists: RAdm. J. F. O'Hara  
Director, Tactical Air,  
Surface and EW Development  
Div. (OP-982)  
Pentagon, Room 5C711  
Washington, DC 20350

Mr. Richard O'Leary  
Vice President, Corporate  
Development  
Onan Corporation  
1400 - 73rd Ave., NE  
Minneapolis, Minnesota 55424

LTC L. L. Higgins  
USAF/RDQRT  
Room 5E381 Pentagon  
Washington, DC 20310

Mr. Ralph F. Allocca  
CERCOM  
Ft. Monmouth, NJ 07703

Mr. Arthur H. Bland  
Defense Construction Supply  
Center (DCSC-LS)  
3990 E Broad St.  
Columbus, Ohio 43215

Mr. R. G. Bowie  
Director, Govt. Market  
Eastman Kodak Co.  
343 State St.  
Rochester, NY 14625

Mr. Fred Crum  
ARINC Research Corp  
2551 Riva Road  
Annapolis, MD 21401

Mr. Kenneth Davenny  
Magnavox  
Suite 405  
1755 S. Jefferson Davis Hwy.  
Arlington, VA 22202

Mr. A. F. DeSantolo  
DARCOM  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Mr. William Finkel  
DISC  
700 Robbins Ave.  
Philadelphia, PA 19111

Mr. Edson Gardner  
DARCOM/DRCMT  
5001 Eisenhower Ave.  
Alexandria, VA 22202

Mr. Donald H. Geesey  
3M Company  
1101 15th St., NW  
Washington, DC 20005

Mr. R. P. McGowan  
HQ DARCOM, DRCDE-DS  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Ms. Stella L. Miller  
Director, Public Affairs  
Natl. Paint & Coatings Assn., Inc.  
1500 Rhode Island Ave., NW  
Washington, DC 20005

Mr. William P. Morris  
Washington Representative  
McDonnell-Douglas  
1150 - 17th St., NW  
Washington, DC 20036

Mr. William E. Nelson  
US Army Armament Materiel  
Readiness Command  
(ARRCOM) DRSAR-LEE  
Rock Island, IL 61299

Dr. E. N. Petrick  
TARADCOM  
Warren, Michigan 48090

Mr. Robert C. Radeloff  
DESC  
1111 Rosendale Drive  
Dayton, Ohio 45430

Mr. P. C. Reger  
Manager, Q. A.  
Hain-Werner Corp.  
1200 National Avenue  
Waukesha, WI 53187

Mr. B. J. Slinger  
Dept. of Army, MERADCOM  
Attn: DRDME-HC  
Ft. Belvoir, VA 22060

Mr. Albert R. South  
ODCSRDA-DAMA-PPM-M  
Room 3C366, Pentagon  
Washington, DC 20310

Mr. Claude A. Utz  
Defense General Supply Center  
Richmond, VA 23219

Mr. W. Richard Wilkins  
Teledyne Inc.  
1501 Wilson Blvd.  
Suite 900  
Arlington, VA 22209

Dr. R. S. Wiseman  
Electronics R&D Command  
(ERADCOM)  
2800 Powder Mill Road  
Adelphi, MD 20783

Workshop B - Market Research

Chairman: Mr. Al Steiner  
Marketing Manager  
Hewlett-Packard  
1501 Page Mill Road  
Palo Alto, California 94304

Panelists: Mr. John Fluke  
Chairman and Chief Executive  
John Fluke Mfg. Co., Inc.  
P. O. Box 43210  
Mountlake Terrace, Wash. 98043

Mr. Oscar Goldfarb  
Office of Secretary of Air Force  
Deputy for Maintenance and  
Supply  
Room 4D865, Pentagon  
Washington, DC 20330

Mr. William L. Clemons  
Associate Director  
Procurement Policy, DARCOM  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Col. E. C. Parker  
PRAM Program Office (ASD/RA)  
HQ Aeronautical Systems Division  
Wright-Patterson AFB, Ohio 45433

Mr. George R. Armstrong  
Defense Construction Supply  
Center, DCSC-PPP  
Columbus, Ohio 43215

Mr. Jack Beckett  
Hewlett-Packard  
1501 Page Mill Road  
Palo Alto, California 94304

Mr. James C. Bond  
Embassy of Canada  
2450 Mass. Ave., NW  
Washington, DC 20008

Mr. Cal C. Bopp  
Cincinnati Electronics Corp.  
2630 Glendale-Milford Rd.  
Cincinnati, Ohio 45241

Mr. Charles W. Clark  
Office of Federal Procurement  
Policy, OMB  
New Executive Office Bldg.  
Washington, DC 20503

Mr. Rudi Draudin  
Advanced Technology Systems  
Division of Austin Co.  
450 West 1st Ave.  
Roselle, NJ 07203

Mr. H. Robert Dunn  
Dep. Director, Office of  
Planning & Management  
Defense Electronics Supply Ctr.  
Dayton, Ohio 45444

Mr. Joseph M Giannotto  
CORADCOM, DRDCO-MT  
Fort Monmouth, NJ 07703

Mr. Hugh G. Francis  
Don Sowle Associates  
1911 Jefferson Davis Highway  
Arlington, Virginia 22202

Mr. Richard L. Jackson  
Collins Govt. Avionics Div.  
Rockwell International  
400 Collins Road, NE  
Cedar Rapids, IA 52406

Thomas F. Jackson  
DARCOM  
5001 Eisenhower Ave.  
Alexandria, Virginia 22333

Mr. Lawrence G. Lates  
Air Force Systems Command  
Andrews Air Force Base  
Washington, DC 20334

Mr. R. H. Lommen  
Manager, Government Sales  
George A. Hormel & Co.  
P.O. Box 800  
Austin, Minnesota 55912

Mr. Don Mitchell  
General Services Admin.  
Federal Supply Service  
Washington, DC 20406

Mr. Elmer L. Peterson  
USAF/RDXM  
Pentagon  
Washington, DC 20330

Mr. Allan Phillips  
Western Electric Co.  
P. O. Box 20046  
Greensboro, NC 27420

Mr. J. M. Robinson  
Sales Associates  
3900 Watson Place, NW  
Washington, DC 20016

Mr. Robert G. Rose  
V.A. Marketing Center  
P. O. Box 76  
Hines, IL 60141

Mr. Greg Saunders  
USDR&E - DMSSO  
Cameron Station  
Alexandria, VA 22314

Mr. Charles Travis  
Experimental Technology  
Incentives Program  
Room A-740, Admin. Bldg.  
National Bureau of Stds.  
Washington, DC 20234

Mr. Donald F. Whalen  
GTE Service Corporation  
1120 Conn. Ave., NW  
Suite 900  
Washington, DC 20036

## Workshop C - Acquisition Strategy

Chairman: Mr. Harvey J. Gordon  
Deputy for Procurement  
Office of the Asst. Sec.  
of the Air Force (Research,  
Development & Logistics)  
Room 4D862, Pentagon  
Washington, DC 20330

Panelists: Mr. Dale Babione  
Director, Contracts and  
Systems Acquisition  
OUSD(R&E)  
Room 3E144, Pentagon  
Washington, DC 20301

Mr. Joseph F. Grosson  
Asst. Deputy Chief of Staff  
of Naval Material  
HQ NAVMAT, Navy Dept.  
Washington, DC 23060

Mrs. Sally Clements  
Deputy for Material Acquisition  
Office of the Asst. Sec. of  
the Army (Research, Develop-  
ment & Acquisition)  
Rm. 3E588, Pentagon  
Washington, DC 20310

Mr. Pete Walton  
Executive Director, Procurement  
Defense Logistics Agency  
Cameron Station  
Alexandria, VA 22314

Ms. Dorothy Solinski  
USAF/LGUPS  
Room 5B284, Pentagon  
Washington, DC 20330

Mr. Douglas S. Anderson  
Manager, Federal Sales  
Alma Desk Co.  
8805 Cold Spring Road  
Potomac, MD 20854

Mr. Marshall Bailey  
Defense General Supply  
Center  
Richmond, VA 23297

Ms. Marilyn S. Barnett  
Defense Logistics Agency  
Cameron Station  
Alexandria, VA 22314

Mr. John A. Battan  
General Services Admin.  
Federal Supply Service  
Washington, DC 20406

Mr. Geoffrey P. Brazeau  
Canadian Commercial Corp.  
Dept. of Supply & Services  
2450 Mass. Ave., NW  
Washington, DC 20008

Mr. D. G. Brewer  
Hughes Aircraft Co.  
Culver City, CA 90230

Mr. Eugene Brownell  
President, Kurz and  
Root Company  
Appleton, Wisconsin 54911

Mr. Fred B. Bunke  
Asst. Comm. for Procurement  
Federal Supply Service  
General Services Admin.  
Washington, DC 20406

Mr. J. C. Camp, Jr.  
Clark Equipment Co.  
P. O. Box 547  
Benton Harbor, MI 49022

Mr. John D. Cardall  
Magnavox Marine Systems  
Operation  
2829 Maricopa St.  
Torrance, CA 90503

Mr. William T. Carnes  
Aeronautical Radio, Inc.  
2551 Riva Rd.  
Annapolis, MD 21401

Mr. Marvin D. Coffland  
AFLC Sacramento Air Logistics  
Center/PPWM  
8133 Lobata  
Citrus Heights, CA 95610

Mr. Michael C. Corridore  
Defense Logistics Agency  
Cameron Station  
Alexandria, VA 22314

Mr. Gilbert M. Crockett  
Hqts. DLA  
Attn: DLA-PR  
Cameron Station  
Alexandria, VA 22314

LCRD. Richard A. Danielson  
Defense Construction Supply  
Center  
Columbus, OH 43215

Mr. L. E. Desmond  
Caterpillar Tractor Co.  
1850 K St., NW  
Washington, DC 20006

Mr. Herman B. Director  
Federal Contract Specialist  
Natl. Small Business Assoc.  
1604 K St., NW  
Washington, DC 20006

Mr. Gerald Dorney  
Defense Industrial Supply Center  
700 Robbins Ave.  
Philadelphia, PA 19111

Mr. Charles W. Fletcher  
Committee for Purchase  
from Blind and Other  
Severely Handicapped  
2009 14th St., North  
Arlington, VA 22201

Mr. Edson Gardner  
DARCOM/DRCMT  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Mr. Leonce E. Gaiter  
General Services Admin.  
Federal Supply Service  
Washington, DC 20406

Mr. Walter Henderson  
OUSDRE-CPA  
3D821 Pentagon  
Washington, DC 20301

Major William J. Hentges  
HQ USAF/LGPL  
Washington, DC 20330

Mr. Eric Herzlick  
Timex  
Waterbury, CT 06720

Mr. B. E. Kirkendall  
Defense General Supply  
Center  
Richmond, VA 23297

Mr. John J. Koehne  
HQ, U.S. Marine Corps  
(Code LBC-4)  
Washington, DC 20380

Mr. Fred J. Kohout  
Defense Personnel Support  
Center  
2800 S. 20th St.  
Philadelphia, PA 19101

Mr. Edward F. Levell  
US Army Natick R&D Command  
(Attn: DRXNM-E)  
Natick, MA 01760

Mr. R. H. Lommen  
George A. Hormel  
Box 800  
Austin, MN 55912

Mr. John S. Maiers  
US Army Materiel Development  
and Readiness Command  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Mr. John Marshall  
Quality Assurance  
Veterans Administration  
810 Vermont Ave., NW  
Washington, DC 20420

Mr. Michael D. McAdams  
HQ AFLC/PPMMS  
Wright Patterson AFB, OH 45433

Mr. Thomas M. McCann, Jr.  
Air Force Inst. of Technology  
AFIT/LSCP  
Wright-Patterson AFT, OH 45433

Lt. Col. Richard McGovern  
DCSRD&A  
3C366, Pentagon  
Washington, DC 20301

Mr. Robert P. McGowan  
HQ DARCOM  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Mr. James McPherson  
ARINC Research Corp.  
2551 Riva Road  
Annapolis, MD 21401

Mr. Armond S. Meacham  
DESC-P  
1507 Wilmington Pike  
Dayton, OH 45444

Mr. Joseph Meylan  
HQ, U.S. Marine Corps  
(Code LBC-3)  
Washington, DC 20380

LTC. William V. Miller  
OASA (IL&FM)  
Rm. 2E 577, Pentagon  
Washington, DC 20310

Ms. Mary E. Miles  
Defense Personnel  
Support Center  
2800 South 20th St.  
Philadelphia, PA 19101

Mr. John A. Mittino  
OUSD (R&E)  
Rm. 2A318, Pentagon  
Washington, DC 20301

Mr. Joseph R. Neigh  
Asst. Dir., Government  
Division  
AMP, Inc.  
8224 Crown Court Rd.  
Alexandria, VA 22308

Mr. William E. Nelson  
AARCOM  
U.S. Army Material  
Readiness Command  
Rock Island, Illinois 61299

Mr. Henry R. Nooe, Jr.  
CERCOM  
ECOM Office Bldg.  
Tinto Falls, NJ 07724

Mr. Robert Ollweiler  
John Fluke Mfg. Co., Inc.  
11501 Huff Court  
Kensington, MD 20795

Mr. Charles F. Otken  
ARRADCOM  
Dover, NJ 07801

Col. Robert E. Oyama  
Hq. USAF/LGPL  
Rm. 4C276, Pentagon  
Washington, DC 20330

Mr. William I. Padgett  
HQ USAF/SPP  
Bolling Air Force Base  
Washington, DC 20332

Col. Kenneth E. Pruett  
USAOTEA  
5600 Columbia Pike  
Falls Church, VA 22041

Mr. John Quillan  
Mars Signal Light Co.  
1224 Industrial Blvd.  
Naples, Florida 33942

Mr. Norbert P. Sarnow  
DPSC-STS  
2800 S. 20th St.  
Philadelphia, PA 19101

Mr. William G. Schmick  
Hewlett-Packard Co.  
2 Choke Cherry Road  
Rockville, MD 20850

Mr. LeRoy J. Schnurbusch  
US Army Tank-Automotive  
Materiel Readiness Command  
Attn: DRCPM-CE  
Warren, MI 48090

Mr. Steven Slavsky  
HQ, U.S. Marine Corps  
(Code LBC-3)  
Washington, DC 20380

Mr. Leo R. St. Jean  
HQ DARCOM  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Mr. Richard A. Stimson  
DLA-SE  
Cameron Station  
Alexandria, VA 22314

Mr. Robert J. Stohlman  
OASA (RD&A)  
Rm. 2E675, Pentagon  
Washington, DC 20301

Mr. Stanley Tesko  
OUSD (R&E)  
Small Business Office  
Washington, DC 20301

Mr. Marvin C. Tyler  
ASD/AEGEN  
Wright-Patterson Air  
Force Base, Ohio 45433

Mr. Robert G. Vollmer  
U. S. Army AVRADCOM  
12th & Spruce St.  
St. Louis, MO 63166

Mr. Raenord B. Walker  
RD&E Dept.  
SACM, ALMC  
Ft. Lee, VA 23801

Mr. Jess R. Watkins  
Gould Inc.  
1745 Jefferson Davis Hwy.  
Arlington, VA 22202

Mr. R. L. Westrum  
ONAN Corp.  
1400 - 73rd Ave., NE  
Minneapolis, MN 55432

Mr. Walter H. White  
U. S. Army  
CERCOM  
Ft. Monmouth, NJ 07703

Workshop D - Logistics Support

Chairman: Mr. J. J. Genovese  
Assistant Deputy Chief of  
Naval Material, Logistics  
Department of Navy  
Washington, DC 20360

Panelists: Mr. Robert Rozycki  
Director, Supply, Policy  
and Programs, MRA&L, OSD  
Room 3B740, Pentagon  
Washington, DC 20301

RAdm R. G. Freeman  
Commandant, Defense Systems  
Management College  
Fort Belvoir, VA 22060

Mr. James F. Maclin  
Asst. Deputy for Materiel  
Readiness  
HQ DARCOM  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Mr. Herbert McCarthy  
Asst. Deputy Commander of  
Plans, Policy, and  
Programs Development  
Naval Supply Systems Command  
Washington, DC 20376

Mr. Vince Walls  
Asst. Deputy Chief of Staff  
for Installations &  
Logistics  
HQ U.S. Marine Corps  
Washington, DC 20380

Lt. Col. D. S. Powers  
System Staff Officer  
HQ USAF, AF/RDPN  
Room 4D317, Pentagon  
Washington, DC 20330

Mr. Edward W. Abernathy  
Chief, Mat. Spt. Br.  
Defense Gen. Supply Ctr.  
Richmond, VA 23297

Mr. Richard Alley  
Deputy Director  
Committee for Blind  
and Handicapped  
2009 14th St. N.  
Arlington, VA 22201

Mr. Robert Anderson  
Vice President  
Owens Minor & Bodeker  
4821 Bethlehem Rd.  
Richmond, VA 23230

Lt. Col. Joseph D. Arcieri  
Defense Systems Mgmt.  
College  
Ft. Belvoir, VA 22060

LCDR. Reed E. Brown  
Chief, Inventory Mgmt.  
Div., Supply Operations  
DGSC  
Richmond, VA 23297

Mr. Thomas R. Burke  
Chief, Mgmt. Supply Office  
DPSC, Clothing & Textiles  
2800 S. 20th St.  
Philadelphia, PA 19101

Mr. James Carter  
CERCOM  
DRSEL-MA-D  
Ft. Monmouth, NJ 07703

CRD. Gerald J. Chasko  
Defense Systems Mgmt.  
College  
Ft. Belvoir, VA 22060

Mr. Douglas Church  
DARCOM-DRCRE-ID  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Mr. John K. Clark  
Hqts., U.S. Army Readiness  
Command, DRSAR-MAT  
Rock Island, IL 61201

Mr. Allen T. Cook  
Chief, Integrated Log.  
Support Office  
TSARCOM  
4300 Goodfellow Blvd.  
St. Louis, MO 63120

Mr. Harry J. Dickinson  
Hqts. NAVMAT (Mat-0423)  
CMB #5, Room 122  
Washington, DC 20360

Mr. Albert DiGiacomo  
Regional Manager  
Kay & Associates  
1745 Jefferson Davis Hwy.  
Arlington, VA 22202

Mr. Walter H. Elbinger  
ASD/AEGM  
Wright-Patterson Air  
Force Base, Ohio 45433

Mr. Howard B. Ellsworth  
OASD (I&L) W.S  
Room 2A318, Pentagon  
Washington, DC 20301

Mr. William E. Eustace  
Chief, Logistics Programs  
Div., DLA-OP  
Cameron Station  
Alexandria, VA 22314

Major Donald R. Hite  
HQ USATARCOM  
Attn: DRSTA-MX  
Warren, Michigan 48090

Major Samuel Hurst  
Defense Communications  
Agency, Code 410  
Washington, DC 20305

Mr. John R. Jivatode  
Staff Assistant  
OASD (MRA&L) SR  
Room 3B740, Pentagon  
Washington, DC 20360

Mr. Vernon A. Jones  
Collins Govt. Avionics  
Rockwell International  
400 Collins Road  
Cedar Rapids, IA 52403

Mr. Harry N. Maragides  
HQ, U.S. Marine Corps  
Code LM0-1  
Washington, DC 20380

Mr. Robert L. McBride  
Deputy Director, Supply  
Operations  
DESC  
Dayton, Ohio 45401

Mr. Patrick J. McFadden  
Inventory Mgmt. Specialist  
DISC  
700 Robbins Ave.  
Philadelphia, PA 19111

Mr. William Moody  
Market Representative  
Caterpillar Tractor Co.  
1030 - 15th St., NW  
Washington, DC 20005

Mr. Carlos E. Richardson  
E. R. Squibb & Sons, Inc.  
P. O. Box 4000  
Princeton, NJ 08540

Capt. Herbert C. Richardson, Jr.  
HQ, U. S. Marine Corps  
Code LM0-4  
Washington, DC 20380

Mr. Kenneth H. Santoro  
Defense Personnel Support  
Center (DPSC-E)  
2800 South 20th St.  
Philadelphia, PA 19101

Mr. Frederick W. Telke, Jr.  
Marketing Rep.  
3M Co.  
1101 15th St., NW  
Washington, DC 20005

Mr. James K. Thurmond  
Lockheed-Georgia Co.  
South Cobb Drive  
Marietta, Georgia 30063

Mr. Jon Townsend  
Eaton Corp.  
26101 Northwestern Highway  
Southfield, Mich. 48076

Mr. Joseph Williamson  
Chief, MSO, DOSO  
DCSC  
Columbus, Ohio 43215

Mr. Richard W. Wills  
Defense Logistics Agency  
Attn: DLA-OPL  
Cameron Station  
Alexandria, VA 22314

Workshop E - Product Evaluation

Chairman: RADM Robert W. Watkins  
Executive Director of  
Quality Assurance  
Defense Logistics Agency  
Cameron Station  
Alexandria, VA 22314

Panelists: Mr. Seymour J. Lorber  
Director of Quality  
Assurance  
HQ U.S. Army Material Div.  
& Readiness Command  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Mr. Willis J. Willoughby  
Asst. Deputy Chief of  
Naval Material (R&E)  
NAVMAT 06  
Rm. 348 Crystal Plaza #5  
Washington, DC 20360

Mr. John W. Tschantz  
Manager, Defense Products  
Caterpillar Tractor Co.  
Peoria, IL 61629

Mr. Ron Gomes  
Defense Fuels & Supply  
Center  
Defense Logistics Agency  
Cameron Station  
Alexandria, VA 22314

Mr. Don C. Atkinson  
HQ, DARCOM  
Attn: DRCQA  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Mr. Robert G. Bowie  
Director, Govt. Markets  
Eastman Kodak Co.  
343 State Street  
Rochester, NY 14650

Mr. Del Burchfield  
Staff Director for QA  
OUSE(R&E) S&S  
2A318, Pentagon  
Washington, DC 20301

Mr. John E. Burke  
DMSSO  
Cameron Station  
Alexandria, VA 22314

Mr. Thomas A. Camp  
Sears, Roebuck and Co.  
925 S. Homan Ave.  
Chicago, IL 60607

Mr. Joseph A. Cavallo  
CERCOM, Dir. Prod.  
Assurance  
Fort Monmouth, NJ 07703

Mr. Richard Chait  
Eng. Std. Div./AMMRC  
Watertown, MA 02172

Mr. Michael C. Corridore  
DLA-SE  
Cameron Station  
Alexandria, VA 22314

Mr. Philip J. Corso  
Mars Signal Light Co.  
1224 Industrial Blvd.  
Naples, Florida 33942

Mr. Norbert Fahey  
Matls. Test Tech. Div.  
AMMRC  
Watertown, MA 02172

Mr. Robert W. Fain  
U.S. Gen. Accounting Office  
PSAD, Room 6073  
441 G St., NW  
Washington, DC 20548

Mr. Ronald P. Johnson  
McDonnell Douglas Corp.  
1150 17th St., NW  
Washington, DC 20036

Mr. Wendell Keyes  
Mobility Equipment R&D  
Command  
Ft. Belvoir, VA 22060

Mr. John Krynnitsky  
Defense Fuel Supply Ctr.  
Cameron Station  
Alexandria, VA 22314

Mr. Douglas Leach  
HQ, DARCOM, DRCQA-E  
5001 Eisenhower Ave.  
Alexandria, VA 22333

Mr. Charles P. Malone  
Supply Service (134C)  
Veterans Administration  
810 Vermont Ave., NW  
Washington, DC 20402

Mr. John Marshall  
Supply Service  
Veterans Administration  
810 Vermont Ave., NW  
Washington, DC 20402

Mr. Kenneth McLain  
Director, of Tech. Operations  
DCSC  
E. Broad Street  
Columbus, Ohio 43215

Ms. Stella L. Miller  
Natl. Paint and Coatings  
Association  
1500 Rhode Island Ave., NW  
Washington, DC 20005

Mr. Lewis Neri  
U.S. Army Aviation  
R&D Command  
DRDAV-QE  
St. Louis, MO 63166

Mr. John J. O'Connor  
Medical Directorate  
DPSC, DLA  
2100 S. 20th St.  
Philadelphia, PA 19101

Mr. Robert C. Radeloff  
DESC  
1507 Wilminton Pike  
Dayton, Ohio 15430

Mr. Phillip C. Reger  
Hein-Werner Corp.  
1200 National Avenue  
Waukesha, WI 53187

Mr. Edward Rudolph, Jr.  
Defense Industrial Supply  
Center  
700 Robbins Ave.  
Philadelphia PA 19111

Mr. William Stapleton  
Sperry Univac  
2233 Wisconsin Ave., NW  
Suite 300  
Washington, DC 20007

Mr. Richard Stimson  
DLA  
Cameron Station  
Alexandria, VA 22314

Col. Ben H. Swett  
Staff Director for R&M  
OUSD(R&E)S&S  
2A318, Pentagon  
Washington, DC 20301

Mr. Rozier L. Thornton  
Defense General Supply  
Center  
Richmond, VA 23297

Mr. Ronald Tumeinski  
U.S. Army Natick R&D  
Command  
Attn: DRXNM-EP  
Natick, MA 01760

Mr. Alan Whelihan  
Federal Supply Service  
General Services Admin.  
Washington, DC 20406

Mr. Glen A. Wurster  
HQ ASD/ENEGE  
Wright-Patterson Air  
Force Base, Ohio 45433

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